

For Reference

NOT TO BE TAKEN FROM THIS ROOM

Ex LIBRIS
UNIVERSITATIS
ALBERTAEASIS





Digitized by the Internet Archive
in 2020 with funding from
University of Alberta Libraries

<https://archive.org/details/Blacker1971>

THE UNIVERSITY OF ALBERTA

TEACHERS' AND PRINCIPALS' PERCEPTIONS OF
SCHOOL BUDGET DECENTRALIZATION

by



DAVID ALAN BLACKER

A THESIS

SUBMITTED TO THE FACULTY OF GRADUATE STUDIES

IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE DEGREE
OF MASTER OF EDUCATION

DEPARTMENT OF EDUCATIONAL ADMINISTRATION

EDMONTON, ALBERTA

FALL, 1971

117
23

THE UNIVERSITY OF ALBERTA
FACULTY OF GRADUATE STUDIES

The undersigned certify that they have read, and
recommend to the Faculty of Graduate Studies for acceptance,
a thesis entitled "Teachers' and Principals' Perceptions of
School Budget Decentralization" submitted by David Alan Blacker
in partial fulfilment of the requirements for the degree of
Master of Education.

Date... *July 23, 1971.*

ABSTRACT

The purpose of this study was to determine whether teachers and principals differ in their perceptions of school budget decentralization. Two aspects of budget decentralization were examined. First, perceptions concerning the degree of autonomy vested in the school to establish a budget for that school were investigated. Second, perceptions of the degrees of participation by teachers and principals in deciding how budgeted sums are to be spent were examined. The study also investigated the relationships between teachers' and principals' perceptions of school budget decentralization and certain personal characteristics of these teachers and principals.

The sample consisted of 274 elementary school teachers and 80 elementary school principals in the Edmonton Public School District. Usable returns were obtained from 58.8 per cent of the teachers and from 66.3 per cent of the principals.

The necessary data were gathered by means of an instrument constructed specifically for this study. Perceptions concerning the degree of budget autonomy vested in the schools were measured by a *School Authority Scale*. Perceptions concerning the degree of participation in expenditure decisions were measured by a *Participation Scale*. Three types of items relating to school budgets were used in the construction of these questionnaires: (1) items directly related to the instructional program, (2) items somewhat related to the instructional program, (3) items peripherally related or unrelated to the instructional program. The statistical treatment of the data included Pearson product-moment correlations, stepwise multiple

linear regression analysis, and one-way analysis of variance.

There were no significant differences between teachers and principals in their perceptions of the extent to which school budget authority was decentralized to the schools. However, both groups preferred more autonomy for the schools than they perceived the schools to have at the time of the survey.

There were no significant differences between teachers and principals in their perceptions of the actual or the preferred degrees of participation by teachers in expenditure decisions. Teachers perceived significantly greater principal involvement in expenditure decisions not directly related to the instructional program than the principals themselves perceived. Principals, significantly more than teachers, preferred greater principal participation in expenditure decisions peripherally related or not related to the instructional program.

Significant relationships were observed between the teachers' perceptions and sex, school size, grade level, years of post-secondary education, and years of teaching experience. No significant relationships were observed between the teachers' perceptions and age, marital status, years of administrative experience, or years in present school. Significant relationships were observed between the principals' perceptions and sex, grade level, and years of administrative experience. No significant relationships were observed between the principals' perceptions and age, school size, years of post-secondary education, years of teaching experience, or years in present school.

ACKNOWLEDGEMENTS

The writer wishes to express his thanks to the thesis supervisor, Dr. E. W. Ratsoy, for his assistance during the various stages of the study. Thanks are also extended to the other committee members, Dr. M. Horowitz and Dr. W. D. Knill.

To the University of Alberta and the Edmonton Public School Board, thanks are extended for the cooperation and financial assistance which made the completion of this study possible.

Finally, and most of all, the writer expresses his sincere thanks and appreciation to his wife, for her patience and assistance.

TABLE OF CONTENTS

CHAPTER	PAGE
I. DEFINITION OF THE PROBLEM	1
Introduction	1
Purpose of the Study	1
Significance of the Study	2
The Problem	3
Limitations of the Study	4
Delimitations of the Study	4
Assumptions	5
Overview of the Thesis	5
References for Chapter I	6
II. REVIEW OF THE LITERATURE	7
Introduction	7
Decentralization	7
Teacher Participation in Decisions	9
Participation in Budgetary Decisions	11
Summary	13
References for Chapter II	15
III. RESEARCH DESIGN	17
Introduction	17
Research Hypotheses	17
Sub-Problem 1.1	17
Sub-Problem 1.2	17
Sub-Problem 2.1	18
Sub-Problem 2.2	18

CHAPTER	PAGE
Instrumentation	19
School Authority Scale	19
Participation Scale	20
Background Information Questionnaire	21
The Sample	22
Data Collection and Analysis	22
References for Chapter III	34
IV. ANALYSIS AND DISCUSSION OF THE DATA PERTAINING TO THE SCHOOL AUTHORITY SCALE	35
Actual and Preferred School Authority	35
Sub-Problem 1.1	35
Findings	35
Additional Findings	39
Discussion	41
Personal Characteristics and the School Authority Scale	42
Sub-Problem 1.2	42
Findings	42
Discussion	52
References for Chapter IV	54
V. ANALYSIS AND DISCUSSION OF THE DATA PERTAINING TO THE PARTICIPATION SCALE	55
Actual and Preferred Participation	55
Sub-Problem 2.1	55
Findings	55
Additional Findings	60
Discussion	61

CHAPTER	PAGE
Personal Characteristics and the Participation Scale	63
Sub-Problem 2.2	63
Findings	63
Discussion	72
References for Chapter V	74
VI. SUMMARY, CONCLUSIONS, AND IMPLICATIONS	75
Summary	75
The Problem	75
The Theoretical Base	76
Instrumentation	77
The Sample	77
Treatment of the Data	78
Hypotheses and Results	78
Conclusions	80
Implications	82
Implications for School Boards	82
Implications for Further Research	83
BIBLIOGRAPHY	84
APPENDIX A: Descriptions of the Subscale Abbreviations	88
APPENDIX B: School Budget Questionnaire	90
APPENDIX C: Factor Analysis of the School Authority Scale and the Participation Scale	98
APPENDIX D: Correlations between Individual Item Responses and Computed Scores	105
APPENDIX E: Percentage Distributions of Responses to the School Authority Scale	112
APPENDIX F: Percentage Distributions of Responses to the Participation Scale	119

LIST OF TABLES

TABLE	PAGE
1. Distribution of Teachers in the Sample by School Size	23
2. Intercorrelations between Teachers' School Authority Scale Scores	26
3. Intercorrelations between Principals' School Authority Scale Scores	27
4. Intercorrelations between Teachers' Participation Scale Scores	29
5. Intercorrelations between Principals' Participation Scale Scores	30
6. Intercorrelation Matrix of Seven Teacher Personal Characteristics	32
7. Intercorrelation Matrix of Seven Principal Personal Characteristics	33
8. Tests of Differences between Teachers' and Principals' Mean Scores on the School Authority Scale	36
9. Mean Scores Obtained by Elementary Teachers and Principals on the School Authority Scale Items	38
10. Stepwise Regression Analyses for Teachers' School Authority Scale Scores	43
11. Stepwise Regression Analyses for Principals' School Authority Scale Scores	44
12. Relationship between School Size and Teachers' School Authority Scale Scores	47
13. Relationship between Grade Level and Teachers' School Authority Scale Scores	48
14. Relationship between Sex and Teachers' School Authority Scale Scores	49
15. Relationship between Sex and Principals' School Authority Scale Scores	50
16. Relationship between Marital Status and Teachers' School Authority Scale Scores	51

TABLE	PAGE
17. Tests of Differences between Teachers' and Principals' Mean Scores on the Participation Scale	56
18. Mean Scores Obtained by Elementary Teachers and Principals on the Participation Scale Items	58
19. Stepwise Regression Analyses for Teachers' Participation Scale Scores	65
20. Stepwise Regression Analyses for Principals' Participation Scale Scores	66
21. Relationship between School Size and Teachers' Participation Scale Scores	68
22. Relationship between Sex and Teachers' Participation Scale Scores	69
23. Relationship between Sex and Principals' Participation Scale Scores	70
24. Relationship between Marital Status and Teachers' Participation Scale Scores	71
25. Factor Analysis of the Actual School Authority Scale . .	99
26. Factor Analysis of the Preferred School Authority Scale .	100
27. Factor Analysis of the Actual Teacher Participation Scale	101
28. Factor Analysis of the Actual Principal Participation Scale	102
29. Factor Analysis of the Preferred Teacher Participation Scale	103
30. Factor Analysis of the Preferred Principal Participation Scale	104
31. Correlations between Level One Budget Items and Teachers' Subscale Scores	106
32. Correlations between Level One Budget Items and Principals' Subscale Scores	107
33. Correlations between Level Two Budget Items and Teachers' Subscale Scores	108

TABLE	PAGE
34. Correlations between Level Two Budget Items and Principals' Subscale Scores	109
35. Correlations between Level Three Budget Items and Teachers' Subscale Scores	110
36. Correlations between Level Three Budget Items and Principals' Subscale Scores	111
37. Percentage Distributions of Responses by Teachers to the School Authority Scale	113
38. Percentage Distributions of Responses by Principals to the School Authority Scale	116
39. Percentage Distributions of Responses by Teachers to the Participation Scale	120
40. Percentage Distributions of Responses by Principals to the Participation Scale	126

CHAPTER I

DEFINITION OF THE PROBLEM

I. INTRODUCTION

Much of the recent literature dealing with the decision-making procedures in organizations has suggested that the effectiveness of an organization may be improved by decentralizing the authority to make certain decisions. According to Griffiths, *et al*, those members of an organization who are likely to be most affected by a decision should be involved in the decision-making process (4:62). Furthermore, the extent of the involvement should be related to the importance of the decision to the individual and the impact it is likely to have on his role in the organization (Bridges, 1:51). In the field of education, there has been a tendency on the part of some school boards to decentralize their decision-making procedures by granting school principals the authority to make decisions that previously had been made by the board or by a central office authority on behalf of the board. A common justification for decentralization of decision-making is that it will "ensure better education for pupils--education more readily adapted to their needs" (Neal, 6:31).

II. PURPOSE OF THE STUDY

The purposes of this study were as follows:

1. To determine the differences between teachers' and principals' perceptions and preferences concerning the degree of

authority over the school's budget granted to the school.

2. To determine the differences between teachers' and principals' perceptions and preferences concerning the degree of participation by teachers and principals in deciding how budgeted monies are to be spent.

3. To determine if there are any significant relationships between the personal and professional characteristics of teachers and principals and their perceptions and preferences concerning school budget decentralization.

III. SIGNIFICANCE OF THE STUDY

Participation in decision-making processes is a currently central issue in the administration of schools. It is essential that a move to decentralize or not decentralize a given decision be made only after carefully weighing the known advantages and disadvantages of such a move. The present study should provide valuable evidence as to the levels of decentralization preferred by teachers and principals.

In addition to having significance for school districts contemplating budget decentralization, the results of the study may have some degree of theoretical significance. Since budget decisions range from decisions directly related to instruction, to decisions unrelated to instruction, teachers' preferences for the extent to which budget decisions are decentralized to the school and for the extent to which teachers participate in budgetary decisions should vary accordingly. Furthermore, the study could be considered to be

a continuation of the educational research conducted by Sharma (7), Simpkins (8), Masse (5), Corriveau (3), and Clarke (2) on participatory decision-making. By focussing on budget decisions rather than examining participation in decisions in a variety of areas such as curriculum, organizational structure, and pupil personnel, the study reported here may present a worthwhile extension of the research previously conducted.

IV. THE PROBLEM

The problem was to investigate the current degree of budget decentralization as perceived by teachers and principals, and the degree of budget decentralization preferred by teachers and principals. Two aspects of school budget decentralization were identified:

- (1) What control does the individual school have over its budget?
- (2) Who makes the decisions as to how budgeted sums are to be spent?

The following sub-problems were examined:

1.1 Are there significant differences between teachers and principals in their perceptions of the actual and the preferred degrees of budget authority decentralized to the schools?

1.2 Are there significant relationships between teachers' or principals' perceptions of the actual or the preferred degrees of budget authority decentralized to the schools and selected personal characteristics of these teachers and principals?

2.1 Are there significant differences between teachers and principals in their perceptions as to who actually participates and who should participate in decisions related to the expenditure of budgeted sums?

2.2 Are there significant relationships between teachers' or principals' perceptions as to who actually participates or who should participate in decisions related to the expenditure of budgeted sums and selected personal characteristics of these teachers and principals?

V. LIMITATIONS OF THE STUDY

1. The uncertain reliability and validity of the instrument used to collect data concerning the perceptions of teachers and principals places a limitation on the study.

2. It is possible that the levels of school autonomy and the levels of participation in budget decisions used in the construction of the questionnaire do not cover all possibilities. Thus, the responses may not accurately correspond with the perceptions of the respondents.

3. The number of decision items surveyed was limited to twenty-two. Thus the findings of the study do not necessarily permit valid generalizations concerning perceptions of other budget decisions.

4. In time, changes in budget policies and practices may occur, thus increasing the rate at which the perceptions of the population sampled may change. Thus, generalizations drawn from the study may apply only at the time of data collection.

VI. DELIMITATIONS OF THE STUDY

1. The study was restricted to the principals of all elementary schools and the teachers of selected elementary schools in the Edmonton Public School District.

2. The study was delimited to a selected number of budget decisions.

3. The study was delimited to the examination of a selected number of personal and professional variables.

VII. ASSUMPTIONS

For the purposes of the study, it was assumed that:

1. The response categories used in the instrument represent a budget authority decentralization continuum from no direct involvement by the school to school autonomy and a participation in expenditure decisions continuum from no direct participation to autonomous decision-making.

2. The perceptions reported were valid indicators of the respondents' true perceptions.

VIII. OVERVIEW OF THE THESIS

The remainder of the thesis is organized in the following manner. Chapter II presents a review of the literature and research findings pertinent to this study. Chapter III is a discussion of the research methodology including descriptions of the instrument and the sample surveyed together with a statement of the research hypotheses. Chapter IV and Chapter V contain analyses and discussions of the results of the study. The concluding chapter, Chapter VI, presents a summary of the study with a statement of conclusions and implications.

REFERENCES FOR CHAPTER I

1. Bridges, E. M., "A Model for Shared Decision Making in the School Principalship," *Educational Administration Quarterly*, 3, Winter 1967, pp. 49-61.
2. Clarke, G. A., "Teachers' Perceptions of School Decision-Making Roles," Unpublished Master's thesis, University of Alberta, 1970.
3. Corriveau, R. L., "A Comparison of Principals' and Teachers' Perceptions of the Actual and Preferred Degree of Teacher Participation in a Number of Decisions," Unpublished Master's thesis, University of Alberta, 1969.
4. Griffiths, D. E., *et al*, *Organizing Schools for Effective Education*, Danville, Illinois: The Interstate Publishers, Inc., 1962.
5. Masse, D., "Teacher Participation and Professional Attitudes," Unpublished doctoral dissertation, University of Alberta, 1969.
6. Neal, W. D., "Centralization and Decentralization," *The Canadian Administrator*, 3, May 1964, pp. 31-34.
7. Sharma, Chirangi Lal, "Who Should Make What Decisions," *Administrator's Notebook*, 8, April 1955.
8. Simpkins, W. S., "The Distribution of Decision-Making Authority in the School," Unpublished doctoral dissertation, University of Alberta, 1968.

CHAPTER II

REVIEW OF THE LITERATURE

I. INTRODUCTION

The literature relating to decentralization of decision-making and teacher participation in decisions is extensive. Some of the more significant writings and research studies are summarized in this section under the following headings: Decentralization, Teacher Participation in Decisions, and Participation in Budgetary Decisions.

II. DECENTRALIZATION

Decentralization is the process by which authority to make certain decisions is moved to a lower level in the organizational hierarchy (Miklos, 11:26). Neal reports that several authors have related the degree of decentralization in an organization to (1) the number of decisions made low in the hierarchy, (2) the importance of such decisions, (3) the number of organizational functions affected by a decision, and (4) the amount and type of intergroup coordination required by a decision (13:33). Lane, Corwin, and Monahan point out that "decentralization must occur whenever administrators supervise personnel who are so highly specialized that the administrator lacks power or competence to make many of their decisions" (7:139). A second rationale for decentralization is provided by Neal (13:31) and MacKay (9:8). Both writers contend that a decentralized structure permits greater flexibility, thus differences among individual teachers and

students may be more readily and rationally accommodated. Decentralization, according to Leavitt, is a mechanism for opening organizations to change by increasing local autonomy (8:49).

In the preface to his book, *Decentralization in Management Systems*, Morris states:

Patterns of decentralization have evolved and been tested as organizations have grown. Effective patterns have survived, but the evolutionary process has been a costly one. Through years of casual experimentation first approximation answers have emerged and recently there have begun to be systematic statements of what these answers are. Yet there appears to be little in the way of carefully stated operational theory on which controlled experiments in the improvement of organizational design might be based. The appearance of organizations that seem to cycle back and forth between relatively high degrees of centralization and decentralization suggests the costliness of casual experimentation (12:v).

In the case of schools and school systems, there is a need for some degree of school autonomy because of the geographical separation between the school and the school system office. The difficult problem is deciding the particular decisions to be decentralized and the right degree of decentralization (Morris, 12:11). Some schools may not desire, or be capable of handling, the same degree of decentralization as other schools (Miklos, 11:27).

In a survey of a large number of teachers, Sharma found that teachers wanted more authority for their individual schools (16). An Alberta study conducted by Wilson investigated principals' perceptions of school autonomy to make decisions in areas related to curriculum and personnel organization (20). Considerable variation in perceived autonomy was reported. The principals indicated that their schools had most authority in the area of pupil organization

and least authority in the area of curriculum planning. Significant relationships between perceived degree of school authority, and grade level and school size were reported. Principals of small elementary schools perceived the lowest degree of school autonomy, while principals of large high schools perceived the highest degree of school autonomy. These findings led Wilson to suggest that principals may not be making full use of the authority actually granted to them.

III. TEACHER PARTICIPATION IN DECISIONS

The essence of participation in decision-making is shared control over organizational policies and procedures by administrators and their subordinates (Tannenbaum, 18:98). Lane, Corwin, and Monahan state that decisions "are formulated to guide the activities of the school. To bring this action about, an administrator must introduce, define, and gain teacher support" (7:133). Bridges contends that involving teachers in school decisions represents one of the most important aspects of the principal's role (2). According to Miklos, neither the feasible limits nor the desirable levels of teacher participation in decisions have yet been reached (11:25). There is a tendency to develop controls based on expected performance of the mediocre teacher, or even the least capable teacher with better teachers being unduly restricted (Neal, 13:34). Consequently, in many situations, teachers are still striving for more authority to make decisions, or at least for participation in decisions in areas that directly affect them and their role in the classroom.

Many studies of teacher participation in decision-making have been conducted in the last twenty years. Sharma investigated teachers' perceptions of actual and preferred teacher involvement in school decisions. A major finding was that teachers desired more involvement by individual teachers and by groups of teachers in matters related to instruction (16). These findings were generally supported by Simpkins' findings in a recent Alberta study (17). The teachers surveyed in this study preferred decisions related to classroom management to be made by the individual teacher and decisions related to school management to be made by the formal staff group. There was less agreement among the teachers in their preferences for decision-making practices than in their perceptions of actual practices.

The majority of the teachers surveyed in a study conducted by Masse reported no actual teacher participation in most school decisions but a preference for collegial involvement by teachers and administrators (10). This study also indicated that teacher preference for increased participation was positively related to the professional orientation of teachers. A similar study was conducted by Corriveau who examined both teachers' and principals' perceptions of actual and preferred teacher participation (6). In all decision areas where significant differences between teachers' and principals' perceptions of actual teacher participation were observed, the principals perceived greater teacher participation than did the teachers. In all decision areas except pupil personnel, where no significant difference was found, teachers preferred a higher degree

of teacher participation than did the principals. These findings are supported and extended by Clarke who reports significant differences between teachers' perceptions of actual and preferred decision-making roles for teachers and principals (5). Teachers generally preferred that most decisions be made cooperatively by the teachers and the principal, whereas they perceived that many decisions were currently made by either the teachers or the principal acting alone.

Finally, Otto and Veldman suggest that there is substantial disagreement between teachers and principals with regard to the appropriate allocation of decision-making power and influence in their schools (14:153). While teachers are apparently expressing desires for increased authority, there is some doubt that they would really want the degree of participation they are requesting. Lane, Corwin, and Monahan state that teachers "seem to be ambivalent about the amount of decision-making responsibility they actually wish to assume" (7:143). Chase reports evidence that too much pressure by administrators to obtain participation can lead to teacher dissatisfaction (4). Riffel suggests that too much teacher control may have dysfunctional aspects in that it may result in a narrowed orientation within the classroom and alienation from the organization (15:36).

IV. PARTICIPATION IN BUDGETARY DECISIONS

While not focussing specifically on budgetary decisions, the studies reported above, and others, do provide evidence pertaining to participation in budgetary matters through the use of questionnaire

items relating to budgets or resource allocation.

Sharma found that teachers preferred to have the individual teacher granted the authority to select materials for classroom use, within limits of a budget established by the superintendent (16). In the opinion of the teachers surveyed, the planning of the school plant should be left to the superintendent, the board, and the principal, but the teacher should have more authority concerning the furnishing and decoration of the classroom. There was general agreement between the teachers' perceptions of the actual and the preferred modes of decision-making relating to salaries. Teachers felt that salary policies and the proportion of the budget allocated to salaries should be decided by the superintendent, the board, and groups of teachers.

In separate investigations, Carson (3) and Benner (1) reported findings indicating that teachers desire more authority over the selection of instructional materials than they currently have. Walters found that many teachers preferred to have decisions relating to the selection of instructional aides, supplies and textbooks made on a cooperative basis with both teachers and administrators participating (19:153). Simpkins found that teachers preferred to have the formal staff group make decisions concerning the allocation of money for instructional aides and equipment (17:209).

Masse reports that a majority of the teachers he surveyed felt they had no actual participation in selecting textbooks and teaching materials or in deciding how much money was to be spent for instructional purposes (10:79-81). The structure preferred by

most teachers for these decisions areas was teacher-administrator cooperation in the decision. Using the same instrument, Corriveau found that teachers and principals generally agreed in their perceptions of the actual participation by teachers in selecting textbooks and teaching materials and in deciding how much money was to be spent for instructional purposes (6). But the teachers preferred significantly greater teacher participation in these decisions than did the principals. Clarke's study provides supporting evidence. The teachers surveyed by Clarke felt that they should have a greater share in decisions relating to the allocation of money for instructional equipment (5:52).

V. SUMMARY

The research and literature cited in this chapter indicates that teachers desire more authority, for themselves as individuals and for their schools, to make decisions concerning school and classroom management. There is some evidence that teachers feel most strongly about matters that are directly related to instruction or to their roles as classroom teachers.

The research findings cited indicate that teachers perceive little or no teacher participation in decisions related specifically to budgetary matters but they prefer these decisions to be made cooperatively by teachers and principals. There is some evidence of agreement between teachers and principals in their perceptions of the actual participation by teachers in budget decisions. However, the degree of teacher participation preferred by teachers is

significantly greater than the degree of teacher participation preferred by principals.

REFERENCES FOR CHAPTER II

1. Benner, Thomas E., "An Investigation Comparing Teacher and Administrator Perceptions of Actual and Ideal Decision-Making Participation Patterns in Selected Elementary School Districts in Illinois," Unpublished doctoral dissertation, University of Illinois, 1966.
2. Bridges, E. M., "Teacher Participation in Decision Making," *Administrator's Notebook*, 12, May 1964.
3. Carson, Robert B., "Teacher Participation in Decision-Making in Education and Other Local Community Activities in Three Oregon Communities," Unpublished doctoral dissertation, University of Oregon, 1965.
4. Chase, F. S., "The Teacher and Policy Making," *Administrator's Notebook*, 1, May 1952.
5. Clarke, G. A., "Teachers' Perceptions of School Decision-Making Roles," Unpublished Master's thesis, University of Alberta, 1970.
6. Corriveau, R. L., "A Comparison of Principals' and Teachers' Perceptions of the Actual and Preferred Degree of Teacher Participation in a Number of Decisions," Unpublished Master's thesis, University of Alberta, 1969.
7. Lane, W. R., R. G. Corwin, and W. G. Monahan, *Foundations of Educational Administration*, New York: The MacMillan Company, 1966.
8. Leavitt, Harold J., "Applied Organizational Change in Industry: Structural Technological and Humanistic Approaches," in (eds.) Netzer, L. A., *et al*, *Interdisciplinary Foundations of Supervision*, Boston: Allyn and Bacon, Inc., 1970, pp. 45-58.
9. MacKay, D. A., "Should Schools be Bureaucratic?" *The Canadian Administrator*, 4, November 1964, pp. 5-8.
10. Masse, D., "Teacher Participation and Professional Attitudes," Unpublished doctoral dissertation, University of Alberta, 1969.
11. Miklos, E., "Increasing Participation in Decision Making," *The Canadian Administrator*, 9, March 1970, pp. 25-29.
12. Morris, W. T., *Decentralization in Management Systems*, Columbus: Ohio State University Press, 1968.

13. Neal, W. D., "Centralization and Decentralization," *The Canadian Administrator*, 3, May 1964, pp. 31-34.
14. Otto, H. J., and D. F. Veldman, "Control Structure in Public Schools and the Decision and Influence Roles of Elementary School Principals and Teachers," *Educational Administration Quarterly*, 3, Spring 1967, pp. 149-161.
15. Riffel, J. A., "The Dynamics of Authority Relationships and Their Implications for the Schools," *CSA Bulletin*, 8, April 1969, pp. 23-44.
16. Sharma, Chirangi Lal, "Who Should Make What Decisions," *Administrator's Notebook*, 8, April 1955.
17. Simpkins, W. S., "The Distribution of Decision-Making Authority in the School," Unpublished doctoral dissertation, University of Alberta, 1968.
18. Tannenbaum, A. S., *Social Psychology of the Work Organization*, Belmont, Cal.: Wadsworth Publishing Company, 1966.
19. Walters, Robert N., "An Analysis of the Extent to Which Teachers Participate in the Administration of the Public Schools of Mississippi," Unpublished doctoral dissertation, University of Mississippi, 1967.
20. Wilson, K. A., "Principals' Perceptions of School Autonomy and the Relationship of These Perceptions to Selected Characteristics of Schools and Principals," Unpublished Master's thesis, University of Alberta, 1968.

CHAPTER III

RESEARCH DESIGN

I. INTRODUCTION

Included in this chapter are a statement of the research hypotheses that were investigated and descriptions of the instrument used in the study and the sample surveyed. The chapter concludes with outlines of the data collection and analysis procedures.

II. RESEARCH HYPOTHESES

The sub-problems identified in Chapter 1 are restated here together with the related hypotheses.

Sub-Problem 1.1

Are there significant differences between teachers and principals in their perceptions of the actual and the preferred degrees of budget authority decentralized to the schools?

Hypothesis 1.1. There are no significant differences between teachers and principals in their perceptions of the actual and the preferred degrees of budget authority decentralized to the schools.

Sub-Problem 1.2

Are there significant relationships between teachers' or principals' perceptions of the actual or the preferred degrees of budget authority decentralized to the schools and selected personal

characteristics of these teachers and principals?

Hypothesis 1.2. There are no significant relationships between teachers' or principals' perceptions of the actual or the preferred degrees of budget authority decentralized to the schools and selected personal characteristics of these teachers and principals.

Sub-Problem 2.1

Are there significant differences between teachers and principals in their perceptions as to who actually participates and who should participate in decisions related to the expenditure of budgeted sums?

Hypothesis 2.1. There are no significant differences between teachers and principals in their perceptions as to who actually participates and who should participate in decisions related to the expenditure of budgeted sums.

Sub-Problem 2.2

Are there significant relationships between teachers' or principals' perceptions as to who actually participates or who should participate in decisions related to the expenditure of budgeted sums and selected personal characteristics of these teachers and principals?

Hypothesis 2.2. There are no significant relationships between teachers' or principals' perceptions as to who actually participates or who should participate in decisions related to the expenditure of budgeted sums and selected personal characteristics of these teachers and principals.

III. INSTRUMENTATION

In order to test the stated hypotheses, an instrument was constructed for administration to a sample of teachers and principals. A copy of this instrument is included in Appendix B. It consisted of three questionnaires, the *School Authority Scale*, the *Participation Scale*, and a questionnaire intended to obtain information concerning the personal and professional characteristics of the respondents. All three questionnaires were similar in format to the *Teacher Participation Questionnaire* used by Masse (6). A brief description of each and the variables they were intended to measure follows.

School Authority Scale

This questionnaire consisted of two subscales, the *Actual School Authority (ASA) subscale*, and the *Preferred School Authority (PSA) subscale* which provided measures of the respondents' perceptions of the actual and the preferred degrees of budget authority vested in their schools. The respondents were asked to check one of four degrees of school authority provided in order to report their perceptions. These were:

- (1) No Direct Involvement by School. The amount budgeted for a given expenditure account is prescribed by the district office.
- (2) Some Reallocation Authority. The amount budgeted for a given expenditure account is prescribed by the district office but the school has some authority to reallocate funds.
- (3) Considerable Reallocation Authority. The amount budgeted

for a given expenditure account is prescribed by the district office but the school has considerable authority to reallocate funds.

(4) School Autonomy. The school decides the amount to be budgeted for a given expenditure account.

The twenty-two budget items included in the scale covered a wide variety of expenditures from items directly related to the instructional program to items not related to the instructional program. Three actual and three preferred school authority scores were obtained on the basis of the following three-way categorization of the budget items.

1. Level One scores (ASA_1 and PSA_1). These scores represent the respondent's mean response to the budget items which are directly related to the instructional program (items 1, 3, 5, 10, 11, 15, 16, 17, 18, and 22).

2. Level Two scores (ASA_2 and PSA_2). These scores represent the respondent's mean response to the budget items which are somewhat related to the instructional program (items 2, 4, 7, 9, 12, 13, and 21).

3. Level Three scores (ASA_3 and PSA_3). These scores represent the respondent's mean response to the budget items which are peripherally related or not related to the instructional program (items 6, 8, 14, 19, and 20).

Participation Scale

The *Participation Scale* consisted of four subscales, the *Actual Teacher Participation (ATP)* subscale, the *Actual Principal Participation (APP)* subscale, the *Preferred Teacher Participation*

(PTP) subscale, and the *Preferred Principal Participation (PPP)* subscale. The respondents were asked to check one of four degrees of participation provided in order to report their perceptions of the actual and preferred participation by the teacher and by the principal. These were:

1. No Direct Participation. There is no participation in deciding how available funds are to be spent.
2. Advice in Decision. There is some participation in deciding how available funds are to be spent through consultation with the person(s) making the final decision.
3. Cooperative Decision. There is considerable participation in cooperation with other persons in deciding how available funds are to be spent.
4. Autonomous Decision. There is total independence in deciding how available funds are to be spent. No other persons participate directly.

This questionnaire contained the same twenty-two budget items as the *School Authority Scale*. The same categorization providing Level One, Level Two, and Level Three scores was used. As a result, twelve scores were obtained for each respondent. Appendix A contains a summary of the six *School Authority Scale* scores and the twelve *Participation Scale* scores.

Background Information Questionnaire

This questionnaire was used to obtain information concerning the personal characteristics of the respondents. It consisted of ten items requesting the respondents to report their sex, age, marital status, position, school size, grade level, years of post-secondary

education, years of teaching experience, years of administrative experience, and years in their present school. These seemed to be the variables which would most likely be related to perceptions of budget decentralization. Many of the variables had been included in an earlier study of teacher participation (Corriveau, 2).

IV. THE SAMPLE

The instrument was administered to elementary teachers and principals in the Edmonton Public School District. All principals of schools offering instruction up to and including the grade six level ($N = 80$) were surveyed. In selecting the teachers to be surveyed, the elementary schools were categorized as small (12 teachers or fewer), medium (13 to 22 teachers), or large (23 to 32 teachers). Schools were then randomly selected within each category so as to yield a group of teachers representative of the teacher population with regard to school size. The distribution of the 274 teachers included in the sample according to school size is shown in Table 1.

V. DATA COLLECTION AND ANALYSIS

The instrument was distributed and returned by mail. Usable questionnaires were returned by 53 principals (66.3%) and 161 teachers (58.8%). Unused returns were obtained from four principals (5.0%) and from 43 teachers (15.7%). Of the latter, twenty-one unused returns (7.7%) were received from two schools. Factors contributing to the high percentage of unused returns from teachers may include the length of the questionnaire which required 142 responses.

Table 1

DISTRIBUTION OF TEACHERS IN THE SAMPLE
BY SCHOOL SIZE

School Size		Number of Schools in Sample and Total Number Possible	Number of Teachers in Sample
Small	(12 or fewer teachers)	7 out of 26	50
Medium	(13 to 22 teachers)	8 out of 36	129
Large	(23 to 32 teachers)	4 out of 18	95
Totals		19	274

Also, several schools were involved in parent-teacher interviews at the time of the survey.

The data were transferred to punched cards using the following scoring system for the *School Authority Scale* and the *Participation Scale*:

<u>School Authority Scale</u>	<u>Score</u>	<u>Participation Scale</u>
No Direct Involvement by School	1	No Direct Participation
Some Reallocation Authority	2	Advice in Decision
Considerable Reallocation Authority	3	Cooperative Decision
School Autonomy	4	Autonomous Decision

The mean scores and percentage distributions obtained by teachers and principals were computed for each item on the two scales.

The twenty-two budget items used in the construction of the *School Authority Scale* and the *Participation Scale* had been classified as (1) directly related to the instructional program, (2) somewhat related to the instructional program, or (3) peripherally related or not related to the instructional program. The two subscales on the *School Authority Scale* and the four subscales on the *Participation Scale* were factor analyzed using from two to five factors to test for the existence of factors which relate to this categorization. The results of the three-factor analysis using the data obtained from principals are presented in Appendix C. The resulting factors tended to be associated more with supplies, equipment, and labor than with the three degrees of relatedness to the instructional program, particularly for the *Actual School Authority*, *Actual Teacher Participation*, and *Actual Principal Participation* subscales.

However, for the present study it was decided to retain the categorization in terms of relatedness to the instructional program because it corresponded more closely with the theoretical justification for decentralization (Neal, 7:31). If the purpose of decentralization is to improve the process of education by making it more flexible and adaptable to individual student and teacher needs, then decisions directly related to the instructional program should generally be decentralized to a greater extent than decisions which are not related to the instructional program.

Eighteen scores for each respondent were obtained by computing the mean score for the items included in the three categories of relatedness to the instructional program on each of the six subscales. Pearson product-moment correlations between the computed scores and the item responses contributing to the scores are presented in Appendix D. Only seven correlations out of the 264 correlations reported were below 0.400 and all except one of the correlations were significantly different from zero at the .05 confidence level.

Tables 2 and 3 present the intercorrelations between the computed scores derived from the responses to the *School Authority Scale* by teachers and principals respectively. The correlations among the *Actual School Authority* scores ranged from 0.721 to 0.850 and the correlations among the *Preferred School Authority* scores ranged from 0.719 to 0.889. These correlations provided evidence that respondents who obtained a high *Actual School Authority* score at one level of relatedness to the instructional program also

Table 2
 INTERCORRELATIONS^a BETWEEN TEACHERS'
 SCHOOL AUTHORITY SCALE SCORES
 (N = 161)

Subscales ^b	ASA ₁	ASA ₂	ASA ₃	PSA ₁	PSA ₂	PSA ₃
ASA ₁	1.000	0.850	0.721	0.429	0.308	0.287
ASA ₂		1.000	0.803	0.385	0.343	0.278
ASA ₃			1.000	0.369	0.300	0.393
PSA ₁				1.000	0.858	0.763
PSA ₂					1.000	0.816
PSA ₃						1.000

^aAll correlations presented in this table are significant at the .001 confidence level.

^bSee Appendix A for descriptions of the subscale abbreviations used in this table.

Table 3
 INTERCORRELATIONS BETWEEN PRINCIPALS'
 SCHOOL AUTHORITY SCALE SCORES
 (N = 53)

Subscales ^a	ASA ₁	ASA ₂	ASA ₃	PSA ₁	PSA ₂	PSA ₃
ASA ₁	1.000	0.826 ^d	0.785 ^d	0.396 ^c	0.114	0.123
ASA ₂		1.000	0.819 ^d	0.374 ^c	0.215	0.230
ASA ₃			1.000	0.300 ^b	0.223	0.228
PSA ₁				1.000	0.782 ^d	0.719 ^d
PSA ₂					1.000	0.889 ^d
PSA ₃						1.000

^aSee Appendix A for descriptions of the subscale abbreviations used in this table.

^bIndicates significance at the .05 confidence level.

^cIndicates significance at the .01 confidence level.

^dIndicates significance at the .001 confidence level.

tended to obtain high scores at the other levels. Similarly, high positive relationships among the *Preferred School Authority* were evident. Correlations between the *Actual School Authority* and the *Preferred School Authority* scores ranged from 0.114 to 0.429 suggesting a much lower degree of association between the actual and the preferred scores even though a number of these correlations were significant.

Tables 4 and 5 present the intercorrelations between the computed scores derived from the responses to the *Participation Scale* by teachers and principals respectively. Intercorrelations within a given subscale ranged from 0.310 to 0.816 with only three of these correlations lower than 0.500, indicating a strong association between the scores. The correlations between scores on different subscales ranged from 0.097 to 0.776 with fifteen of the fifty-four correlations exceeding 0.500.

Hypotheses 1.1 and 2.1 were tested using the *t* test to examine the differences between the principals' and teachers' mean scores. The Welch approximation was used in cases where variance homogeneity was lacking (Ferguson, 4:171).

Multiple linear regression and analysis of variance were used to test Hypotheses 1.2 and 2.2 concerning possible relationships between the computed scores and selected personal variables. The personal characteristics that were continuous variables were examined using the stepwise multiple linear regression method outlined by Draper and Smith (3:171). The criterion adopted to distinguish continuous and categorical variables was that suggested by Bottenberg and Ward (1:49), that is, continuous variables are

Table 4
INTERCORRELATIONS BETWEEN TEACHERS'
PARTICIPATION SCALE SCORES
(N = 161)

Subscales ^a	ATP ₁	ATP ₂	ATP ₃	APP ₁	APP ₂	APP ₃	PTP ₁	PTP ₂	PTP ₃	PPP ₁	PPP ₂	PPP ₃
ATP ₁	1.000	0.688 ^d	0.569 ^d	0.437 ^d	0.208 ^c	0.098	0.264 ^d	0.243 ^c	0.056	0.229 ^d	0.144	0.036
ATP ₂		1.000	0.737 ^d	0.347 ^d	0.411 ^d	0.324 ^d	0.173 ^b	0.312 ^d	0.233 ^c	0.060	0.090	0.188 ^b
ATP ₃			1.000	0.315 ^d	0.277 ^d	0.301 ^d	0.156 ^b	0.232 ^c	0.383 ^d	0.121	0.086	0.250 ^c
APP ₁				1.000	0.705 ^d	0.494 ^d	0.165 ^b	0.174 ^b	0.105	0.569 ^d	0.474 ^d	0.302 ^d
APP ₂					1.000	0.766 ^d	-0.050	0.099	0.068	0.246 ^c	0.372 ^d	0.402 ^d
APP ₃						1.000	-0.040	0.063	0.134	-0.003	0.162 ^b	0.564 ^d
PTP ₁							1.000	0.816 ^d	0.528 ^d	0.509 ^d	0.548 ^d	0.291 ^d
PTP ₂								1.000	0.653 ^d	0.445 ^d	0.624 ^d	0.394 ^d
PTP ₃									1.000	0.317 ^d	0.432 ^d	0.616 ^d
PPP ₁										1.000	0.770 ^d	0.310 ^d
PPP ₂											1.000	0.528 ^d
PPP ₃												1.000

^aSee Appendix A for description of the subscale abbreviations used in this table.

^bIndicates significance at the .05 confidence level.

^cIndicates significance at the .01 confidence level.

^dIndicates significance at the .001 confidence level.

Table 5

INTERCORRELATIONS BETWEEN PRINCIPALS'
PARTICIPATION SCALE SCORES
(N = 53)

Subscales ^a	ATP ₁	ATP ₂	ATP ₃	APP ₁	APP ₂	APP ₃	PTP ₁	PTP ₂	PTP ₃	PPP ₁	PPP ₂	PPP ₃
ATP ₁	1.000	0.707 ^d	0.572 ^d	0.702 ^d	0.594 ^d	0.578 ^d	0.374 ^c	0.235	0.031	-0.097	-0.092	-0.056
ATP ₂		1.000	0.679 ^d	0.449 ^c	0.763 ^d	0.776 ^d	0.183	0.294 ^b	-0.002	-0.101	-0.082	-0.017
ATP ₃			1.000	0.430 ^c	0.604 ^d	0.664 ^d	0.217	0.320 ^b	0.360 ^c	0.034	0.145	0.142
APP ₁				1.000	0.654 ^d	0.493 ^d	0.083	0.065	0.049	0.412 ^c	0.298 ^b	0.166
APP ₂					1.000	0.781 ^d	0.044	0.091	0.006	0.183	0.236	0.153
APP ₃						1.000	0.073	0.221	0.099	-0.011	0.079	0.311 ^b
PTP ₁							1.000	0.765 ^d	0.516 ^d	0.176	0.286 ^b	0.313 ^b
PTP ₂								1.000	0.638 ^d	0.206	0.443 ^c	0.539 ^d
PTP ₃									1.000	0.231	0.439 ^c	0.524 ^d
PPP ₁										1.000	0.787 ^d	0.514 ^d
PPP ₂											1.000	0.736 ^d
PPP ₃												1.000

^aSee Appendix A for descriptions of the subscale abbreviations used in this table.

^bIndicates significance at the .05 confidence level.

^cIndicates significance at the .01 confidence level.

^dIndicates significance at the .001 confidence level.

variables which can have more than two values. The stepwise multiple linear regression method may result in the rejection of a predictor variable in favor of a second predictor variable which correlates highly with the first. In view of this, intercorrelation matrices for the seven teacher and principal personal characteristics which are continuous variables were obtained. These matrices, presented in Tables 6 and 7, revealed a number of significant correlations between variables. However, several of these were moderately low. High positive correlations were observed between age and both years of teaching experience and years in present school for teachers and principals. For principals, age, grade level, years of teaching experience, and years in present school all correlated positively with years of administrative experience. For teachers, a correlation of -0.346 was observed between age and size of school. Years in present school and years of teaching experience correlated positively for both groups.

Analysis of variance was used to test the categorical variables and to indicate possible curvilinear relationships between the continuous variables and the computed scores. In cases where a significant *F* ratio was obtained involving three or more groups, the Scheffe method was used to compare the means two at a time (Ferguson, 4:296). The confidence level was set at .05 except where the distribution of the dependent variable departed significantly from normality, in which case a more rigorous level, .025, was adopted as suggested by Lindquist (5:83).

Table 6
INTERCORRELATION MATRIX OF SEVEN TEACHER PERSONAL CHARACTERISTICS^a

Variables	1	2	3	4	5	6	7
1. Age	1.000	-0.346 ^d	0.109	-0.247 ^c	0.550 ^d	0.825 ^d	0.207 ^c
2. Size of school	1.000	-0.020	0.056	-0.103	-0.280 ^d	-0.280 ^d	-0.233 ^c
3. Grade level		1.000	0.280 ^d	0.082	0.147	-0.046	
4. Amount of training			1.000	-0.199 ^b	-0.249 ^c	-0.009	
5. Years in present school				1.000	0.584 ^d	0.042	
6. Teaching experience					1.000		
7. Administrative experience						1.000	0.169 ^b

^aOnly the personal characteristics that are continuous variables are included.

^bIndicates significance at the .05 confidence level.

^cIndicates significance at the .01 confidence level.

^dIndicates significance at the .001 confidence level.

Table 7

INTERCORRELATION MATRIX OF SEVEN PRINCIPAL PERSONAL CHARACTERISTICS^a

Variables	1	2	3	4	5	6	7
1. Age	1.000	0.128	-0.098	-0.039	0.604 ^d	0.743 ^d	0.595 ^d
2. Size of school	1.000	0.153	-0.025	0.045	0.175	0.249	
3. Grade level		1.000	-0.180	0.136	-0.138	0.333 ^b	
4. Amount of training			1.000	-0.264	0.011	-0.067	
5. Years in present school				1.000	0.411 ^c	0.525 ^d	
6. Teaching experience					1.000	0.675 ^d	
7. Administrative experience						1.000	

^aOnly the personal characteristics that are continuous variables are included.

^bIndicates significance at the .05 confidence level.

^cIndicates significance at the .01 confidence level.

^dIndicates significance at the .001 confidence level.

REFERENCES FOR CHAPTER III

1. Bottemberg, R. A., and J. H. Ward, *Applied Multiple Linear Regression*, Lackland Air Force Base, Texas: 6570th Personnel Research Laboratory, Aerospace Medical Division, 1963.
2. Corriveau, R. L., "A Comparison of Principals' and Teachers' Perceptions of the Actual and Preferred Degree of Teacher Participation in a Number of Decisions," Unpublished Master's thesis, University of Alberta, 1969.
3. Draper, N. R., and H. Smith, *Applied Regression Analysis*, New York: John Wiley and Sons, Inc., 1966.
4. Ferguson, G. A., *Statistical Analysis in Psychology and Education*, New York: McGraw-Hill Book Company, 1966.
5. Lindquist, E. F., *Design and Analysis of Experiments in Psychology and Education*, Boston: Houghton Mifflin Company, 1953.
6. Masse, D. "Teacher Participation and Professional Attitudes," Unpublished doctoral dissertation, University of Alberta, 1969.
7. Neal, W. D., "Centralization and Decentralization," *The Canadian Administrator*, 3, May 1964, pp. 31-34.

CHAPTER IV

ANALYSIS AND DISCUSSION OF THE DATA PERTAINING TO THE SCHOOL AUTHORITY SCALE

I. ACTUAL AND PREFERRED SCHOOL AUTHORITY

Sub-Problem 1.1

Sub-problem 1.1 was to determine whether there were significant differences between teachers and principals in their perceptions of the actual extent to which budget authority was decentralized to the schools or in the extent to which they preferred budget authority to be decentralized to the schools.

Hypothesis 1.1. It was hypothesized that there would be no significant differences between teachers and principals in their perceptions of the actual and the preferred degrees of budget authority decentralized to the schools.

The *t* test was used to assess the significance of the difference between teachers' and principals' mean scores.

Findings

The results of the *t* tests for significant differences between teachers' and principals' mean scores are shown in Table 8. The six scores for each group were obtained by classifying the items on the *Actual School Authority* and the *Preferred School Authority* subscales as (1) directly related to the instructional program, (2) somewhat related to the instructional program, or (3) peripherally related or not related to the instructional program. Thus, for

Table 8

TESTS OF DIFFERENCES BETWEEN TEACHERS' AND PRINCIPALS'
MEAN SCORES ON THE SCHOOL AUTHORITY SCALE

Subscale ^a	Teachers (N = 161)		Principals (N = 53)		t	p
	Mean	S.D.	Mean	S.D.		
ASA ₁	1.96	0.66	1.98	0.63	0.142	0.887
ASA ₂	1.74	0.60	1.61	0.48	1.430	0.154
ASA ₃	1.46	0.55	1.42	0.39	0.722 ^b	0.472
PSA ₁	3.24	0.54	3.27	0.57	0.389	0.697
PSA ₂	3.02	0.62	3.13	0.61	1.120	0.264
PSA ₃	2.68	0.71	2.81	0.72	1.151	0.251

^aSee Appendix A for description of the subscale abbreviations used in this table.

^bWelch t'.

example, the ASA_2 mean score for teachers reported in Table 8 is the grand mean of all responses by teachers to the items on the *Actual School Authority* subscale which were classified as being somewhat related to the instructional program. Descriptions of all subscale abbreviations are presented in Appendix A. As indicated in Table 8, there were no significant differences between teachers and principals in their perceptions of the actual or the preferred degrees of budget authority decentralized to the schools.

To further examine the data, mean scores were computed for each item on the *Actual School Authority* and the *Preferred School Authority* subscales. The mean scores obtained by teachers and principals are presented in Table 9. Examination of this table revealed that the principals' mean scores on the *Actual School Authority* subscale were substantially lower than the teachers' mean scores for Duplicating equipment (item 7), Audio-visual equipment (item 9), Physical Education supplies (item 18), and Paraprofessional services (item 21). The principals' mean score for Supplies for general school use (item 6) was substantially higher than the teachers' mean score on this item. No substantial differences were observed between the teachers' and the principals' mean scores on the remainder of the *Actual School Authority* subscale items and on the *Preferred School Authority* subscale items.

In summary, while there were no significant differences between the mean scores obtained by teachers and principals when the items were grouped on the basis of relatedness to the instructional program, there were substantial differences between the mean scores

Table 9

MEAN SCORES OBTAINED BY ELEMENTARY TEACHERS AND PRINCIPALS
ON THE SCHOOL AUTHORITY SCALE ITEMS

Budget Item	Actual School Authority Subscale		Preferred School Authority Subscale	
	Teachers	Principals	Teachers	Principals
1. Textbooks	2.26	2.13	3.32	3.26
2. Free reading books	2.33	2.47	3.32	3.45
3. Student reference books	2.27	2.32	3.25	3.40
4. Professional reference books	2.16	2.21	3.19	3.47
5. Supplies for classroom use	2.03	2.30	3.12	3.23
6. Supplies for general school use	1.84	2.21 ^a	3.02	3.23
7. Duplicating equipment	1.70	1.32 ^b	2.93	2.91
8. Office equipment	1.55	1.28	2.70	2.94
9. Audio-visual equipment	1.72	1.30 ^b	3.12	3.11
10. Audio-visual materials	1.99	2.08	3.31	3.38
11. Wall maps and posters for classroom use	2.00	2.09	3.29	3.36
12. Classroom tables, desks	1.39	1.28	2.84	2.92
13. Classroom bookcases, bulletin boards	1.50	1.55	2.89	3.13
14. Staff lounge furniture	1.30	1.30	2.87	2.96
15. Science supplies	1.98	2.17	3.28	3.34
16. Art supplies	2.04	2.17	3.37	3.30
17. Music supplies	1.91	1.85	3.28	3.25
18. Physical Education supplies	1.84	1.51 ^b	3.35	3.15
19. Caretaking services	1.25	1.08	2.25	2.11
20. Secretarial services	1.38	1.21	2.55	2.79
21. Paraprofessional services	1.39	1.13 ^b	2.88	2.94
22. Professional services	1.29	1.13	2.80	3.04

^aIndicates that the principals' mean score is substantially higher than the teachers' mean score.

^bIndicates that the principals' mean score is substantially lower than the teachers' mean score.

obtained by teachers and principals on certain individual items on the *Actual School Authority* subscale. Thus, it was concluded that there was insufficient evidence to reject Hypothesis 1.1 on the basis of the statistical test of hypothesis 1.1 that was adopted *a priori*. However, for five budget items there was evidence of substantial difference of opinion between teachers and principals as to the actual extent of budget authority decentralized to the school.

Additional Findings

Further examination of Table 8 revealed a consistent decrease in the mean scores from those most closely related to instruction to those least related to instruction. Furthermore, the "preferred" scores were consistently and substantially higher than the corresponding "actual" scores. The latter finding was substantiated by the individual item mean scores reported in Table 9.

The mean scores on the individual items on the *Actual School Authority* subscale ranged from 1.25 for teachers and 1.08 for principals to 2.33 for teachers and 2.47 for principals. For the *Preferred School Authority* subscale, the mean scores on the individual items ranged from 2.25 to 3.37 for teachers and from 2.11 to 3.47 for principals.

Appendix E contains Tables 37 and 38 which show the percentage distributions of responses to each item on the *School Authority Scale* by teachers and by principals respectively. With only one exception, at least fifty per cent of both samples perceived the school to have either no direct involvement or some reallocation authority but preferred the school to have considerable reallocation

authority or complete autonomy in deciding on the amount to be allocated to each item. For item nineteen (Caretaking services), eighty per cent of the teachers and over ninety per cent of the principals perceived the school to have no involvement in establishing the budget for this item, while nearly sixty per cent of the teachers and seventy per cent of the principals preferred the school to have no involvement or to have only some authority to reallocate funds.

On nine items (items 7, 8, 12, 13, 14, 19, 20, 21, and 22) at least fifty per cent of the teachers felt the school had no direct involvement in deciding on the amount to be allocated to the item. The teachers were approximately equally divided as to whether they preferred the school to have some reallocation authority, considerable reallocation authority, or complete autonomy. On these same nine items and one additional item (item 9: Audio-visual equipment), fifty per cent or more of the principals felt the school had no direct involvement in establishing the amount to be allocated to the item while generally preferring the school to have considerable reallocation authority.

On no budget item did fifty per cent or more of the teachers express a preference for school autonomy. However, twenty-five per cent or more preferred school autonomy on all but three items, namely, office equipment (item 8), caretaking services (item 19), and secretarial services (item 20). At least fifty per cent of the principals preferred the school to have complete autonomy to establish the budget for free reading books (item 2) and professional

reference books (item 4) and at least twenty-five per cent preferred school autonomy on all items with the exception of caretaking services (item 19) and secretarial services (item 20).

Discussion

In general, the teachers and principals were in close agreement on the actual extent of budget authority decentralized to the schools and on the extent of budget authority they would prefer to have decentralized to the schools. This tends to support Sharma's finding that teachers want more authority for their schools (2).

In the Massee study, the teachers indicated that they personally had little or no involvement in deciding how much money was to be spent for instructional purposes (1). The preferred structure was teacher-administrator cooperation in the decision. In the present study, it was evident that teachers and principals preferred the school to have considerable control over the amount that was to be budgeted for purposes other than instruction as well as for instructional purposes. However, a greater degree of budget autonomy was desired for instructional purposes than for purposes less related to instruction. It may be that the teachers and principals felt that all aspects of the school budget were, in varying degrees, directly related to the effectiveness of the instructional program and therefore of considerable importance to the school. In any case, it was evident that both teachers and principals preferred a greater degree of budget decentralization than they perceived at the time of the survey.

II. PERSONAL CHARACTERISTICS AND THE SCHOOL AUTHORITY SCALE

Sub-Problem 1.2

Sub-Problem 1.2 was to determine whether there were any significant relationships between teachers' or principals' perceptions of the extent to which budget authority was decentralized to the schools and selected personal variables.

Hypothesis 1.2. It was hypothesized that there would be no significant relationships between teachers' or principals' perceptions of the actual or the preferred degrees of budget authority decentralized to the schools and selected personal characteristics of these teachers and principals.

Stepwise multiple linear regression analysis and analysis of variance were used to test the personal characteristics which are continuous variables. Analysis of variance was used to test the personal characteristics which are categorical variables. The categorical variables examined were sex and marital status. The continuous variables examined were age, school size, grade level, years of post-secondary education, years of teaching experience, years of administrative experience, and years in present school.

Findings

The results of the multiple linear regression analyses of the relationships between the personal characteristics which are continuous variables and the six computed *School Authority Scale* scores are presented in Tables 10 and 11 for teachers and principals respectively.

Table 10

STEPWISE REGRESSION ANALYSES FOR TEACHERS'
SCHOOL AUTHORITY SCALE SCORES^a

Criterion Variable	Predictor Variable ^b	Regression Correlation	Significance R
ASA ₁	none		
ASA ₂	none		
ASA ₃	School size	-0.251	.01
PSA ₁	none		
PSA ₂	Years in present school	-0.268	.001
PSA ₃	School size	-0.267	.05
	Age	-0.295	.05

^aSee Appendix A for descriptions of the subscale abbreviations used in this table.

^bThe predictor variables tested were age, school size, grade level, years of post-secondary education, years of teaching experience, years of administrative experience, and years in present school. A sufficient number of teachers reported having had some administrative experience to permit years of administrative experience to be classified as a continuous variable.

Table 11

STEPWISE REGRESSION ANALYSES FOR PRINCIPALS'
SCHOOL AUTHORITY SCALE SCORES^a

Criterion Variable	Predictor Variable ^b	Regression Correlation R	Significance
ASA ₁	Teaching experience	-0.286	.05
ASA ₂	Grade level	0.275	.05
ASA ₃	School size	-0.300	.05
PSA ₁	Age	-0.379	.01
PSA ₂	none		
PSA ₃	none		

^aSee Appendix A for descriptions of the subscale abbreviations used in this table.

^bThe predictor variables tested were age, school size, grade level, years of post-secondary education, years of teaching experience, years of administrative experience, and years in present school. A sufficient number of principals reported that they were assigned predominantly to a grade level other than grade six to permit grade level to be classified as a continuous variable.

School size was significantly related to teachers' perceptions of the actual budget authority decentralized to the schools for items which are peripherally related or not related to the instructional program (ASA_3). Years in present school was significantly related to the teachers' preferred extent of budget authority decentralization for items which are somewhat related to the instructional program (PSA_2). School size and age were significantly related to teachers' preferred extent of budget authority decentralization for items which are peripherally related or not related to the instructional program (PSA_3). For principals, significant relationships were observed between years of teaching experience and their perceptions of the actual extent of budget authority decentralization for items directly related to the instructional program (ASA_1), between grade level and their perceptions of the actual extent of budget authority decentralization for items somewhat related to the instructional program (ASA_2), and between school size and their perceptions of the actual extent of budget authority decentralization for items which are peripherally related or not related to the instructional program (ASA_3). Age was significantly related to principals' preferred extent of budget authority decentralization for items which are directly related to the instructional program (PSA_1).

The obtained regression correlations were relatively low in all cases. The largest regression correlation was obtained for principals between their ages and their PSA_1 scores. Only 14.4 per cent of the variance in this score was accounted for by the predictor variable.

Examination by analysis of variance of the personal characteristics which are continuous variables revealed significant *F* ratios that had not been indicated by the regression analysis for teachers when grouped according to school size and grade level. Table 12 shows the results of the analysis of variance for teachers when grouped by school size. Significant *F* ratios were obtained for all the scores except PSA_2 , while significant linear relations between school size and only the ASA_3 and PSA_3 scores were indicated by the regression analysis. When the teachers were grouped according to grade level, only the PSA_3 scores produced a significant *F* ratio as shown in Table 13. All other significant *F* ratios obtained by grouping the teachers or the principals according to age, years of post-secondary education, years of teaching and administrative experience, and years in present school corresponded with significant linear relationships previously indicated by the linear regression analysis.

The two personal variables which are categorical variables, sex and marital status, were examined using analysis of variance. Whereas only two principals were single, no analysis of the scores was attempted for principals when grouped according to marital status. The results of the analyses completed are shown in Tables 14, 15, and 16. Examination of these tables indicated no significant differences between the mean scores obtained by male and female teachers, by male and female principals, or by single and married teachers.

In summary, of the variables tested, school size seems to be the personal characteristic which is most associated with teachers' perceptions of the actual and the preferred degrees of budget

Table 12
RELATIONSHIP BETWEEN SCHOOL SIZE AND TEACHERS' SCHOOL AUTHORITY SCALE SCORES^a

Group	School size	N	ASA ₁	ASA ₂	ASA ₃	PSA ₁	PSA ₂	PSA ₃
1	15 teachers or fewer	44	2.223	1.893	1.736	3.416	3.201	2.959
2	16 to 22 teachers	66	1.797	1.576	1.352	3.139	2.950	2.579
3	23 teachers or more	51	1.947	1.821	1.377	3.206	2.970	2.565
			<i>F</i> ratio	5.89	4.48	8.02	3.68	2.49
			Significance	.01	.05	.01	.05	.01
			Sig. dif. between groups	1 and 2				
				2 and 3	1 and 3	1 and 3	1 and 3	1 and 3

^aSee Appendix A for descriptions of the subscale abbreviations used in this table.

Table 13

RELATIONSHIP BETWEEN GRADE LEVEL AND TEACHERS' SCHOOL AUTHORITY SCALE SCORES^a

Group	Grade	N	ASA ₁	ASA ₂	ASA ₃	PSA ₁	PSA ₂	PSA ₃
1	1 and 2	55	1.945	1.699	1.436	3.295	3.107	2.822
2	3 and 4	47	2.004	1.790	1.451	3.096	2.845	2.438
3	5 and 6	59	1.941	1.739	1.501	3.236	3.092	2.736
	<i>F</i> ratio		0.14	0.29	0.22	2.26	2.83	4.22
	Significance		NS	NS	NS	NS	NS	.05
	Sig. dif. between groups							1 and 2 2 and 3

^aSee Appendix A for descriptions of the subscale abbreviations used in this table.

Table 14
RELATIONSHIP BETWEEN SEX AND TEACHERS' SCHOOL AUTHORITY SCALE SCORES^a

Sex	N	ASA ₁	ASA ₂	ASA ₃	PSA ₁	PSA ₂	PSA ₃
Male	31	2.013	1.793	1.497	3.252	3.069	2.703
Female	130	1.949	1.728	1.457	3.232	3.014	2.672
<i>F</i> ratio		0.24	0.29	0.13	0.03	0.19	0.05
Significance		NS	NS	NS	NS	NS	NS

^aSee Appendix A for descriptions of the subscale abbreviations used in this table.

Table 15

RELATIONSHIP BETWEEN SEX AND PRINCIPALS' SCHOOL AUTHORITY SCALE SCORES^a

Sex	N	ASA ₁	ASA ₂	ASA ₃	PSA ₁	PSA ₂	PSA ₃
Male	47	2.107	1.644	1.447	3.264	3.116	2.796
Female	6	1.650	1.333	1.167	3.317	3.286	2.900
<i>F</i> ratio		1.85	2.24	2.91	0.04	0.41	0.11
Significance		NS	NS	NS	NS	NS	NS

^aSee Appendix A for descriptions of the subscale abbreviations used in this table.

Table 16
RELATIONSHIP BETWEEN MARITAL STATUS AND TEACHERS' SCHOOL AUTHORITY SCALE SCORES^a

Marital Status	N	ASA ₁	ASA ₂	ASA ₃	PSA ₁	PSA ₂	PSA ₃
Single	37	1.889	1.703	1.411	3.141	2.919	2.584
Married	124	1.982	1.751	1.481	3.265	3.056	2.706
<i>F</i> ratio		0.57	0.18	0.45	1.50	1.39	0.86
Significance		NS	NS	NS	NS	NS	NS

^a See Appendix A for descriptions of the subscale abbreviations used in this table.

authority decentralized to the schools. Teachers in smaller schools tend to perceive and prefer more decentralization of budget authority than teachers in larger schools. Age, grade level, and years in present school were significantly related to the teachers' preferred degree of budget authority decentralization at different levels of relatedness to the instructional program. No significant relationships were found between teachers' perceptions and the variables sex, marital status, years of post-secondary education, or years of teaching or administrative experience. For principals, years of teaching experience, grade level, and school size were significantly related to their perceptions of the actual degree of budget authority decentralization at different levels of relatedness to the instructional program. Age was significantly related to the principals' preferred degree of budget authority decentralization for items directly related to the instructional program. No significant relationships were found between principals' perceptions and the variables sex, years of post-secondary education, years of administrative experience, or years in present school.

Discussion

Most of the earlier studies concerned with decentralization of decision-making which have included items related to budgeting have focussed primarily on teacher and principal participation in decisions on the expenditure of budgeted resources rather than on the extent to which the authority to make decisions is decentralized to the school as a unit. The evidence in the present study suggests that there are significant relationships between teachers' and principals'

perceptions of the extent of budget authority decentralized to the school and certain personal characteristics of these teachers and principals. However, with the exception of school size, there was no obvious pattern of association between the personal characteristics and the budget authority perceptions.

In Wilson's study of Alberta principals, school size and grade level were significantly related to principals' perceptions of school autonomy to make decisions in areas related to curriculum and personnel organization (3). Wilson's findings are somewhat supported by the findings of the present study where school size, grade level, and years of teaching experience were significantly related to principals' perceptions of the actual degree of budget authority decentralization.

REFERENCES FOR CHAPTER IV

1. Masse, D., "Teacher Participation and Professional Attitudes," Unpublished doctoral dissertation, University of Alberta, 1969.
2. Sharma, Chiranj Lal, "Who Should Make What Decisions," *Administrator's Notebook*, 8, April 1955.
3. Wilson, K. A., "Principals' Perceptions of School Autonomy and the Relationship of These Perceptions to Selected Characteristics of Schools and Principals," Unpublished Master's thesis, University of Alberta, 1968.

CHAPTER V

ANALYSIS AND DISCUSSION OF THE DATA PERTAINING TO THE PARTICIPATION SCALE

I. ACTUAL AND PREFERRED PARTICIPATION

Sub-Problem 2.1

Sub-problem 2.1 was to determine whether there were significant differences between teachers and principals in their perceptions as to who actually participates and who should participate in deciding how budgeted sums should be spent.

Hypothesis 2.1. It was hypothesized that there would be no significant differences between teachers and principals in their perceptions as to who participates and who should participate in decisions related to the expenditure of budgeted sums.

The *t* test was used to assess the significance of the difference between teachers' and principals' mean scores.

Findings

The results of the *t* tests for significant differences between teachers' and principals' mean scores are shown in Table 17. The twelve scores for each group were obtained by classifying the items on the actual and preferred participation subscales as (1) directly related to the instructional program, (2) somewhat related to the instructional program, or (3) peripherally related or not related to the instructional program. Thus, for example, the *ATP*₁ mean score for teachers reported in Table 17 is the grand mean of all responses by teachers to the items on the *Actual Teacher*

Table 17

TESTS OF DIFFERENCES BETWEEN TEACHERS' AND PRINCIPALS'
MEAN SCORES ON THE PARTICIPATION SCALE

Subscale ^a	Teachers (N = 161)		Principals (N = 53)		t	p
	Mean	S.D.	Mean	S.D.		
ATP ₁	2.28	0.52	2.41	0.53	1.511	0.132
ATP ₂	1.94	0.52	2.05	0.58	1.334	0.183
ATP ₃	1.36	0.54	1.43	0.44	0.919	0.359
APP ₁	2.54	0.55	2.42	0.52	1.470	0.143
APP ₂	2.36	0.62	2.13	0.59	2.358	0.019
APP ₃	2.18	0.85	1.94	0.59	2.249 ^b	0.026
PTP ₁	3.00	0.39	3.02	0.40	0.282	0.778
PTP ₂	2.81	0.51	2.93	0.42	1.511	0.132
PTP ₃	2.26	0.69	2.28	0.60	0.209	0.835
PPP ₁	2.87	0.51	2.88	0.56	0.117	0.907
PPP ₂	2.80	0.48	2.91	0.45	1.548	0.123
PPP ₃	2.61	0.65	2.82	0.49	2.515 ^b	0.013

^aSee Appendix A for description of the subscale abbreviations used in this table.

^bWelch t'.

Participation subscale which were classified as being directly related to the instructional program. Descriptions of all subscale abbreviations are presented in Appendix A.

As indicated in Table 17, three significant *t* ratios were found. The teachers' perceptions of the principals' involvement in the expenditure decisions somewhat related to the instructional program (APP_2) and in the expenditure decisions bearing little or no relation to instruction (APP_3) were significantly greater than the principals' perceptions of their involvement. The principals' preference for principal participation in expenditure decisions peripherally related or not related to the instructional program (PPP_3) was significantly greater than the teachers' preference for principal participation.

To further examine the data, mean scores were computed for each item on the actual and preferred participation subscales. The mean scores obtained by teachers and principals are presented in Table 18. Examination of this table revealed that the principals' mean scores on the *Actual Teacher Participation* subscale were substantially higher than the teachers' mean scores for the following items: Supplies for classroom use (item 5), Wall maps and posters for classroom use (item 11), Classroom bookcases, showcases, and bulletin boards (item 13), and Science supplies (item 15). The principals' mean scores on the *Actual Principal Participation* subscale were substantially lower than the teachers' mean scores for Duplicating equipment (item 7), Audio-visual equipment (item 9), Classroom tables, chairs, desks (item 13), Physical Education

Table 18

MEAN SCORES OBTAINED BY ELEMENTARY TEACHERS AND PRINCIPALS
ON THE PARTICIPATION SCALE ITEMS

Budget Item	Teacher Participation	Actual		Preferred		Preferred	
		T ^a	P ^b	T	P	T	P
1. Textbooks		2.71	2.77	2.73	2.74	3.09	3.02
2. Free reading books		2.99	3.06	2.48	2.60	3.23	3.19
3. Student reference books		2.83	2.87	2.54	2.60	3.19	3.13
4. Professional reference books		2.57	2.72	2.57	2.55	3.09	3.13
5. Supplies for classroom use	1.83	2.15 ^c	2.69	2.75	2.73	2.68	2.91
6. Supplies for general school use	1.60	1.87	2.64	2.87	2.37	2.26	2.77
						2.81	3.00
7. Duplicating equipment		1.51	1.64	2.37	2.06 ^d	2.43	2.68
8. Office equipment		1.40	1.25	2.40	2.11	2.10	2.06
9. Audio-visual equipment		2.10	1.92	2.48	2.06 ^d	2.87	3.00
10. Audio-visual materials		2.51	2.79	2.55	2.57	3.04	3.17
11. Wall maps and posters for classroom use		2.35	2.75 ^c	2.58	2.64	3.03	3.13
						2.86	2.85
12. Classroom tables, desks		1.50	1.72	2.30	1.98 ^d	2.68	2.92
13. Classroom bookcases, show-cases, bulletin boards		1.58	1.92 ^c	2.29	2.11	2.80	2.85
14. Staff lounge furniture		1.35	1.62	1.86	1.75	2.68	2.74
						2.94	2.91

Table 18 continued

Budget Item	Actual Teacher Participation	Actual Principal Participation		Preferred Teacher Participation		Preferred Principal Participation	
		T	P	T	P	T	P
15. Science supplies	2.41	2.77 ^c	2.56	2.55	3.07	3.13	2.99
16. Art supplies	2.29	2.47	2.70	2.60	3.12	3.08	2.94
17. Music supplies	2.27	2.19	2.48	2.21	3.11	3.09	2.92
18. Physical Education supplies	2.17	2.04	2.56	2.04 ^d	3.08	3.06	2.77
19. Caretaking services	1.18	1.13	1.92	1.32 ^d	1.97	1.94	2.35
20. Secretarial services	1.26	1.30	2.07	1.66 ^d	2.19	2.21	2.45
21. Paraprofessional services	1.43	1.40	2.04	1.57 ^d	2.57	2.72	2.83
22. Professional services	1.42	1.25	2.05	1.47 ^d	2.55	2.70	2.71

^aMean scores for teachers.

^bMean scores for principals.

^cIndicates that the principals' mean score is substantially higher than the teachers' mean score.

^dIndicates that the principals' mean score is substantially lower than the teachers' mean score.

supplies (item 18), and Caretaking, Secretarial, Paraprofessional, and Professional services (items 19 through 22). No substantial differences were observed between the teachers' and the principals' mean scores on the *Preferred Teacher Participation* subscale. The principals' mean scores on the *Preferred Principal Participation* subscale were substantially higher than the teachers' mean scores for Office equipment (item 8), and Secretarial services (item 20). In summary, when the items were grouped on the basis of relatedness to the instructional program, significant differences were observed between the mean scores of teachers and principals on the APP_2 , APP_3 , and PPP_3 subscales. Substantial differences were observed between the mean scores of teachers and principals on certain individual items on the *ATP*, *APP*, and *PPP* subscales.

Additional Findings

Further examination of Table 17 revealed a tendency for the mean scores to decrease from those directly related to the instructional program to those peripherally related or not related to instruction. This tendency is evident for teachers and principals on all subscales except for the *Preferred Principal Participation* subscale where the principals' mean scores remain relatively constant throughout. Furthermore, the "preferred" participation scores were consistently and substantially higher than the corresponding "actual" scores. The latter finding was generally substantiated by the individual item mean scores reported in Table 18 with the following exceptions where the preferred scores are only moderately higher than the actual scores: Free reading books and

Student reference books (items 2 and 3)--teacher and principal participation as perceived by teachers and principals; Supplies for general school use (item 6) and Wall maps and posters for classroom use (item 11)--principal participation as perceived by teachers and principals; Duplicating equipment (item 7), Office equipment (item 8), and Art supplies (item 16)--principal participation as perceived by teachers; Supplies for classroom use (item 5)--principal participation as perceived by principals; Textbooks (item 1)--teacher participation as perceived by principals and principal participation as perceived by teachers and principals. In all other cases, the individual item "preferred" scores were substantially higher than the corresponding "actual" scores.

The percentage distributions of the responses to the Participation Scale by teachers and principals are reported in Tables 39 and 40 which have been included in Appendix F.

Discussion

The findings presented here support some of the findings reported in Chapter II but do not support others. The teachers and principals in this study generally agreed on the actual and preferred degrees of participation by teachers in decisions related to the expenditure of budgeted sums. Corriveau reported findings which indicated agreement between teachers and principals in their perceptions of the actual extent of teacher participation in deciding on the expenditure of funds for instructional purposes, but the teachers' preferences for teacher participation exceeded those of the principals (2). Masse reported that the teachers

involved in his survey perceived little or no participation in decisions related to the expenditure of funds for instructional purposes while they preferred teacher-principal cooperation in these decisions (3:79-81). The teachers involved in the present study indicated considerable actual participation in a number of expenditure decisions that are closely related to instruction. The differences between the findings of the present study and those of Corriveau and Masse may be a result of differences in the populations. The two studies mentioned were conducted in rural and urban Quebec while the present study was conducted in an urban setting in Alberta.

In an Alberta study of decision-making in schools, Clarke found that teachers generally preferred most decisions to be made cooperatively between the teachers and the principal, whereas they perceived that many decisions were made by either the teachers or the principal acting alone (1). In the present study, most respondents preferred cooperative decision-making but few perceived teacher or principal autonomy on any decision.

In summary, the findings of this study suggest that teachers and principals are in general agreement as to the extent of actual and preferred teacher participation in budget expenditure decisions. However, the teachers perceived greater principal participation in expenditure decisions not directly related to the instructional program than did the principals. The principals preferred greater principal participation than the teachers preferred in expenditure decisions bearing little or no relation to the instructional program.

II. PERSONAL CHARACTERISTICS AND THE PARTICIPATION SCALE

Sub-Problem 2.2

Sub-problem 2.2 was to determine whether there were any significant relationships between teachers' or principals' perceptions of the extent to which teachers or principals actually participate or should participate in decisions related to the expenditure of budgeted sums and selected personal characteristics of these teachers and principals.

Hypothesis 2.2. It was hypothesized that there would be no significant relationships between teachers' or principals' perceptions as to who actually participates or who should participate in decisions related to the expenditure of budgeted sums and selected personal characteristics of these teachers and principals.

Stepwise multiple regression analysis and analysis of variance were used to test the personal characteristics which are continuous variables. Analysis of variance was used to test the personal characteristics which are categorical variables. The categorical variables examined were sex and marital status. The continuous variables examined were age, school size, grade level, years of post-secondary education, years of teaching experience, years of administrative experience, and years in present school.

Findings

The results of the multiple linear regression analyses of the relationships between the personal characteristics which are continuous variables and the twelve *Participation Scale* scores are

presented in Tables 19 and 20 for teachers and principals respectively.

Years of teaching experience was significantly related to teachers' perceptions of the actual extent of teacher participation in expenditure decisions somewhat related to the instructional program (ATP_2). School size and grade level were significantly related to teachers' perceptions of the actual extent of teacher participation in expenditure decisions bearing little or no relation to the instructional program (ATP_3). School size was significantly related to the degrees of teacher and principal participation preferred by teachers in expenditure decisions bearing little or no relation to the instructional program (PTP_3 and PPP_3). Years of post-secondary education was significantly related to the degree of principal participation preferred by teachers in expenditure decisions directly related and somewhat related to the instructional program (PPP_1 and PPP_2). For principals, significant relationships were observed between years of administrative experience and their perception of the actual extent of principal participation in expenditure decisions directly related to the instructional program (APP_1), and between grade level and the preferred extent of principal participation in expenditure decisions somewhat related to the instructional program (PPP_2).

The obtained regression correlations were relatively low in all cases. The largest correlation was obtained for teachers' ATP_3 scores using school size and grade level as the predictor variables. Only 11.4 per cent of the variance in the criterion variable could be accounted for by the predictor variables.

Table 19

STEPWISE REGRESSION ANALYSES FOR TEACHERS'
PARTICIPATION SCALE SCORES^a

Criterion Variable	Predictor Variable ^b	Regression Correlation R	Significance
ATP ₁	none		
ATP ₂	Teaching experience	0.158	.05
ATP ₃	School size	-0.291	.001
	Grade level	0.338	.05
APP ₁	none		
APP ₂	none		
APP ₃	none		
PTP ₁	none		
PTP ₂	none		
PTP ₃	School size	-0.271	.001
PPP ₁	Post-secondary education	0.252	.01
PPP ₂	Post-secondary education	0.216	.01
PPP ₃	School size	-0.219	.01

^aSee Appendix A for descriptions of the subscale abbreviations used in this table.

^bThe predictor variables tested were age, school size, grade level, years of post-secondary education, years of teaching experience, years of administrative experience, and years in present school. A sufficient number of teachers reported having had some administrative experience to permit years of administrative experience to be classified as a continuous variable.

Table 20

STEPWISE REGRESSION ANALYSES FOR PRINCIPALS'
PARTICIPATION SCALE SCORES^a

Criterion Variable	Predictor Variable ^b	Regression Correlation R	Significance
ATP ₁	none		
ATP ₂	none		
ATP ₃	none		
APP ₁	Administrative experience	-0.297	.05
APP ₂	none		
APP ₃	none		
PTP ₁	none		
PTP ₂	none		
PTP ₃	none		
PPP ₁	none		
PPP ₂	Grade level	-0.281	.05
PPP ₃	none		

^aSee Appendix A for descriptions of the subscale abbreviations used in this table.

^bThe predictor variables tested were age, school size, grade level, years of post-secondary education, years of teaching experience, years of administrative experience, and years in present school. A sufficient number of principals reported that they were assigned to a grade level other than grade six to permit grade level to be classified as a continuous variable.

Examination by analysis of variance of the personal characteristics which are continuous variables revealed significant F ratios that had not been indicated by the regression analyses for teachers when grouped according to school size. Table 21 shows the results of this analysis. The significant relationships which had not been revealed by the regression analysis concerned the APP_1 , PTP_2 , and PPP_1 scores. In each case the teachers in smaller schools tended on the average to score higher than the teachers in larger schools. All other significant F ratios obtained by grouping the teachers or the principals according to age, grade level, years of post-secondary education, years of teaching experience, years of administrative experience, and years in present school corresponded with significant linear relationships previously indicated by the linear regression analysis.

The two personal variables which are categorial variables, sex and marital status, were examined using analysis of variance. Whereas only two principals were single, no analysis of the scores was attempted for principals when grouped according to marital status. The results of the analyses completed are shown in Tables 22, 23, and 24. Examination of these tables revealed that male teachers perceived significantly greater actual principal involvement at all three levels of relatedness to instruction than female teachers. Female principals preferred significantly greater principal participation at all three levels of relatedness to instruction than male principals. However, the number of female principals in the sample was low. No significant differences between single and married teachers were observed.

Table 21
RELATIONSHIP BETWEEN SCHOOL SIZE AND TEACHERS' PARTICIPATION SCALE SCORES^a

Group	School size	N	ATP ₁	ATP ₂	ATP ₃	APP ₁	APP ₂	APP ₃	PTP ₁	PTP ₂	PTP ₃	PPP ₁	PPP ₂	PPP ₃
1	15 or fewer teachers	44	2.380	2.000	1.618	2.677	2.328	2.236	3.059	2.873	2.595	2.957	2.851	2.823
2	16 to 22 teachers	66	2.336	2.020	1.352	2.588	2.439	2.206	3.039	2.881	2.218	2.933	2.846	2.603
3	23 or more teachers	51	2.122	1.787	1.145	2.371	2.289	2.098	2.902	2.667	2.027	2.706	2.689	2.424
F ratio														
Significance		NS ^b		.001	.05	NS	NS	NS	.05	.001	.05	NS	NS	.05
Sig. dif. between groups														
		1 - 2	1 - 3									2 - 3	1 - 2	1 - 3
		1 - 3										1 - 3	2 - 3	1 - 3

^aSee Appendix A for descriptions of the subscale abbreviations used in this table.

Computed F ratio required to be significant at .025 level due to inadequate variance homogeneity.

Table 22
RELATIONSHIP BETWEEN SEX AND TEACHERS' PARTICIPATION SCALE SCORES^a

Sex	N	ATP ₁	ATP ₂	ATP ₃	APP ₁	APP ₂	APP ₃	PTP ₁	PTP ₂	PTP ₃	PPP ₁	PPP ₂	PPP ₃
Male	31	2.126	1.931	1.368	2.732	2.705	2.736	3.016	2.899	2.426	2.929	2.889	2.781
Female	130	2.317	1.943	1.357	2.498	2.279	2.048	2.998	2.790	2.222	2.853	2.776	2.565
F ratio		3.40	0.02	0.01	4.59	12.72	18.21	0.05	1.16	2.20	0.56	1.40	2.84
Significance	NS	NS	NS	.05	.001	.0001	NS						

^aSee Appendix A for descriptions of the subscale abbreviations used in this table.

Table 23
RELATIONSHIP BETWEEN SEX AND PRINCIPALS' PARTICIPATION SCALE SCORES^a

Sex	N	ATP ₁	ATP ₂	ATP ₃	APP ₁	APP ₂	APP ₃	PTP ₁	PTP ₂	PTP ₃	PPP ₁	PPP ₂	PPP ₃
Male	47	2.460	2.082	1.438	2.436	2.158	1.975	3.000	2.906	2.247	2.809	2.854	2.762
Female	6	1.983	1.833	1.400	2.267	1.929	1.700	3.167	3.095	2.567	3.417	3.381	3.267
F ratio		4.58	0.99	0.04	0.57	0.79	1.15	0.92	1.07	1.55	6.94	8.34	6.16
Significance	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	.05	.01	.05

^aSee Appendix A for descriptions of the subscale abbreviations used in this table.

Table 24
RELATIONSHIP BETWEEN MARITAL STATUS AND TEACHERS' PARTICIPATION SCALE SCORES^a

Marital status	N	ATP ₁	ATP ₂	ATP ₃	APP ₁	APP ₂	APP ₃	PTP ₁	PTP ₂	PTP ₃	PPP ₁	PPP ₂	PPP ₃
Single	37	2.330	2.012	1.389	2.592	2.359	2.011	3.014	2.830	2.341	2.905	2.803	2.519
Married	124	2.265	1.919	1.350	2.529	2.362	2.231	2.998	2.805	2.237	2.856	2.796	2.632
F ratio	0.43	0.89	0.15	0.37	0.00	1.92	0.05	0.07	0.64	0.26	0.01	0.88	
Significance	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

^aSee Appendix A for descriptions of the subscale abbreviations used in this table.

In summary, of the variables tested, school size and sex seem to be the personal characteristics which are most associated with teachers' perceptions of participation in expenditure decisions. Teachers in smaller schools tended to perceive and prefer greater teacher and principal participation than teachers in larger schools. Male teachers tended to perceive greater principal participation than female teachers. Grade level, years of post-secondary education, and years of teaching experience were significantly related to one or more measures of teacher perception of participation in expenditure decisions. No significant relationships were found between teachers' perceptions and the variables age, marital status, years of administrative experience, and years in present school.

Female principals preferred greater principal involvement in expenditure decisions than male principals. Years of administrative experience was significantly related to one measure of the principals' perceptions of actual principal participation and grade level was significantly related to one measure of the principals' perceptions of preferred principal participation. No significant relationships were found between principals' perceptions and the variables age, school size, years of post-secondary education, years of teaching experience, or years in present school.

Discussion

In his study of Quebec teachers and principals, Corriveau found evidence that sex, civil status, years of post-secondary education, grade level, and school size were associated with perception of teacher participation in a number of decisions (2:84).

There was further evidence that age, years of teaching experience, years of administrative experience, and years in present school were associated with perceptions of teacher participation in a few decisions. The present study indicated fewer associations between teachers' and principals' perceptions and certain personal characteristics. The reasons for the different findings may lie in the different populations surveyed and in the fact that Corriveau tested each item individually for associations with personal characteristics whereas only the mean scores on groups of items were tested in the present study.

REFERENCES FOR CHAPTER V

1. Clarke, G. A., "Teachers' Perceptions of School Decision-Making Roles," Unpublished Master's thesis, University of Alberta, 1970.
2. Corriveau, R. L., "A Comparison of Principals' and Teachers' Perceptions of the Actual and Preferred Degree of Teacher Participation in a Number of Decisions," Unpublished Master's thesis, University of Alberta, 1969.
3. Masse, D., "Teacher Participation and Professional Attitudes," Unpublished doctoral dissertation, University of Alberta, 1969.

CHAPTER VI

SUMMARY, CONCLUSIONS, AND IMPLICATIONS

I. SUMMARY

The Problem

The problem was to investigate the current degree of school budget decentralization as perceived by teachers and principals, and the degree of budget decentralization preferred by teachers and principals. Two aspects of school budget decentralization were identified relating to two types of budget decisions. First, the amount to be made available for each budget item must be established. The extent to which the school is given the authority to decide on the amount to be allocated to a given item is a measure of budget decentralization. Second, the way in which the budgeted resources are to be expended must be established. The extent to which teachers and principals participate in these expenditure decisions provides further measures of budget decentralization. This study examined the perceptions of teachers and principals in these areas through investigations of the following sub-problems:

1.1. Are there significant differences between teachers and principals in their perceptions of the actual and the preferred degrees of budget authority decentralized to the schools?

1.2. Are there significant relationships between teachers' or principals' perceptions of the actual or the preferred degrees of budget authority decentralized to the schools and selected personal characteristics of these teachers and principals?

2.1. Are there significant differences between teachers and principals in their perceptions as to who actually participates and who should participate in decisions related to the expenditure of budgeted sums?

2.2. Are there significant relationships between teachers' or principals' perceptions as to who actually participates or who should participate in decisions related to the expenditure of budgeted sums and selected personal characteristics of these teachers and principals?

The Theoretical Base

Decentralized decision-making procedures are purported to provide increased organizational flexibility, permitting the individual differences which exist among members of an organization to be more readily accommodated. In a decentralized system, matters which relate closely to the functions of a given component of the system are referred to the group of individuals constituting that component for their consideration. In so doing, the needs of the individuals may be satisfied and decisions may be made on the basis of more complete information. Thus, in theory, the effectiveness of the instructional program may be enhanced by granting principals and teachers the authority to make decisions on matters which are directly related to their functions in the school and the classroom.

The literature and research evidence cited in Chapter II suggest that teachers and principals should be involved more in decisions pertaining to the school and the classroom. Furthermore, teachers seem to want more autonomy for themselves and for their schools. The studies conducted by Sharma, Masse, Simpkins, Corriveau,

and Clarke all provide evidence of a conflict between the decision-making structures as perceived by teachers and principals and the decision-making structures within which they would prefer to operate.

Instrumentation

Two scales were constructed specifically for this study. The *School Authority Scale* consisted of two subscales providing measures of the perceived and preferred degrees of school authority to decide on the allocation of the monetary resources available to it. The *Participation Scale* consisted of four subscales providing measures of the perceived and preferred degrees of participation by teachers and principals in decisions related to the expenditure of budgeted sums. Both scales required the respondents to report their perceptions for twenty-two budget items. The budget items included some which were directly related to the instructional process, some which were somewhat related to instruction, and some which had little or no relation to instruction. As a result of this three-way categorization, the six scales yielded eighteen scores for each respondent.

The Sample

The principals selected for this study included all principals of elementary schools in the Edmonton Public School District. The teachers included were all teachers of selected elementary schools. The selection procedure involved categorizing the elementary schools as small, medium or large and then randomly selecting schools within each category to obtain a group of teachers representative of the population with respect

to school size. The returns yielded a sample of 53 principals (66.3%) and 161 teachers (58.8%).

Treatment of the Data

The *t* test was used to test for differences between the perceptions of teachers and principals. Analysis of variance was used to test for differences within each of these groups. Stepwise multiple linear regression was used to test for relationships between the subscale scores and the personal characteristics which were continuous variables. The level of significance for these tests was set at the .05 level of confidence.

Hypotheses and Results

Hypothesis 1.1, that there would be no significant differences between teachers and principals in their perceptions of the actual and the preferred degrees of budget authority decentralized to the schools was not rejected. While there were no significant differences between the perceptions of teachers and principals, both groups tended to prefer a higher degree of budget authority decentralization than they perceived. Furthermore, both groups perceived and preferred increasing budget authority decentralization with increasing relatedness to instruction. These findings were derived from mean scores for groups of items. Item by item examination revealed substantial differences between the perceptions of teachers and principals for five out of the twenty-two items.

Hypothesis 1.2, that there would be no significant relationships between teachers' or principals' perceptions of the

actual or the preferred degrees of budget authority decentralized to the schools and selected personal characteristics of these teachers and principals was partially rejected. Significant relationships were observed between the teachers' perceptions and age, school size, grade level, and years in present school. No significant relationships were observed between the teachers' perceptions and sex, marital status, years of post-secondary education, years of teaching experience, or years of administrative experience. Significant relationships were observed between the principals' perceptions and age, school size, grade level, and years of teaching experience. No significant relationships were observed between the principals' perceptions and sex, years of post-secondary education, years of administrative experience, or years in present school.

Hypothesis 2.1, that there would be no significant differences between teachers and principals in their perceptions as to who actually participates and who should participate in decisions related to the expenditure of budgeted sums was partially rejected. The teachers perceived greater involvement by the principals in expenditure decisions not directly related to instruction than the principals perceived. The principals preferred greater principal participation in expenditure decisions not related to instruction than the teachers preferred. There were no significant differences between teachers and principals in their perceptions of the actual or the preferred degrees of teacher participation. With one exception, there was a tendency for both groups to perceive increasing actual and preferred degrees of teacher and principal participation with increasing relatedness to instruction. The principals'

preferences for principal participation showed little tendency to vary with changing relatedness to instruction. For both groups, the preferred teacher or principal participation scores tended to be substantially higher than the corresponding actual participation scores. Item by item examination revealed substantial differences between the perceptions of teachers and principals for twelve of the twenty-two items.

Hypothesis 2.2, that there would be no significant relationships between teachers' or principals' perceptions as to who actually participates or who should participate in decisions related to the expenditure of budgeted sums and selected personal characteristics of these teachers and principals was partially rejected. Significant relationships were observed between the teachers' perceptions and sex, school size, grade level, years of post-secondary education, and years of teaching experience. No significant relationships were observed between the teachers' perceptions and age, marital status, years of administrative experience, or years in present school. Significant relationships were observed between the principals' perceptions and sex, grade level, and years of administrative experience. No significant relationships were observed between the principals' perceptions and age, school size, years of post-secondary education, years of teaching experience, or years in present school.

II. CONCLUSIONS

On the basis of the results obtained in this study, the following conclusions can be drawn.

1. Teachers' and principals' perceptions of the actual and the preferred degrees of school budget authority are in general agreement. Both groups expressed a desire for increased decentralization in the establishment of a budget for their schools. There was some evidence of a desire for complete school autonomy for certain items.

2. Teachers perceive significantly greater principal involvement in expenditure decisions not directly related to the instructional program than the principals themselves perceive. Principals prefer significantly greater principal participation in expenditure decisions peripherally related or not related to the instructional program than teachers prefer. The teachers' and principals' perceptions of the actual and the preferred extent of teacher participation in expenditure decisions are in general agreement. With the exception of a few individual items, both groups expressed a desire for increased teacher and principal participation in expenditure decisions.

3. There is some evidence that certain teacher and principal personal characteristics are related to their perceptions concerning budget authority decentralization and participation in expenditure decisions. With the exception of marital status, all personal characteristics tested were significantly related to at least one measure of budget authority decentralization or participation in expenditure decisions. The variables which seemed to be closely related were sex, school size, and grade level. The variables which showed some relation were age, years of post-secondary education, years of teaching experience, years of administrative experience, and years in present school.

III. IMPLICATIONS

Implications for School Boards

Even though recent moves have been made to grant schools increasing authority to modify the way in which the financial resources available to the school are budgeted, teachers and principals still do not feel that enough control is vested in the schools. This, in itself, is not sufficient reason to increase the budgetary autonomy of the schools. Decentralization carries with it certain costs as well as benefits. If more decisions are to be made at the school level, it may be necessary to provide more teacher or principal time to make these decisions. It seems likely that this would lead to increased staffing requirements. Furthermore, there is no assurance that increased school autonomy would result in changed teacher or principal perceptions of budget authority decentralization.

A second implication of importance to school boards lies in the wide range of teacher and principal perceptions and preferences for any given budget item. It is evident that there are individual differences among educators with regard to these matters. It should be no less evident that there are differences among schools. What may be appropriate for one school may be entirely inappropriate for another. School boards should give some consideration to the possibility of differentiating between schools as to the degree of authority to establish a school budget to be granted to each school.

Implications for Further Research

The findings of the present study have shown that elementary teachers and principals are generally agreed as to their perceptions of the actual and preferred degrees of school budget authority and participation in budget decisions. It is suggested that similar investigations be conducted at other grade levels and in other school systems. Whereas the regression correlations between the personal characteristics and the various subscale scores were all moderately low, additional personal variables should be included.

It is quite possible that some of the variance in perceptions could be accounted for by certain characteristics of the individual schools. It is suggested that investigations be conducted in which the school as a unit is examined.

The scales developed for the present study appear to discriminate meaningfully between perceptions of actual and preferred degrees of decentralization and among the three levels of relatedness to the instructional program. However, replications are needed to further test the validity and reliability of the instrument.

Finally, it has been noted that the findings of this study do not entirely support those of Sharma, Masse, Corriveau, and Clarke. These studies examined teacher participation in a wide variety of school decisions while the present study examined participation in a much narrower range of decisions. It may be possible to focus on other areas such as pupil personnel or the instructional program in order to permit an in-depth examination of school autonomy and participation in decisions in these areas.

BIBLIOGRAPHY

BIBLIOGRAPHY

1. Benner, Thomas E., "An Investigation Comparing Teacher and Administrator Perceptions of Actual and Ideal Decision-Making Participation Patterns in Selected Elementary School Districts in Illinois," Unpublished doctoral dissertation, University of Illinois, 1966.
2. Bottenberg, R. A., and J. H. Ward, *Applied Multiple Linear Regression*, Lackland Air Force Base, Texas: 6570th Personnel Research Laboratory, Aerospace Medical Division, 1963.
3. Bridges, E. M., "Teacher Participation in Decision Making," *Administrator's Notebook*, 12, May 1964.
4. _____ "A Model for Shared Decision Making in the School Principalsip," *Educational Administration Quarterly*, 3, Winter 1967, pp. 49-61.
5. Carson, Robert B., "Teacher Participation in Decision-Making in Education and Other Local Community Activities in Three Oregon Communities," Unpublished doctoral dissertation, University of Oregon, 1965.
6. Chase, F. S., "The Teacher and Policy Making," *Administrator's Notebook*, 1, May 1952.
7. Clarke, G. A., "Teachers' Perceptions of School Decision-Making Roles," Unpublished Master's thesis, University of Alberta, 1970.
8. Corriveau, R. L., "A Comparison of Principals' and Teachers' Perceptions of the Actual and Preferred Degree of Teacher Participation in a Number of Decisions," Unpublished Master's thesis, University of Alberta, 1969.
9. Draper, N. R., and H. Smith, *Applied Regression Analysis*, New York: John Wiley and Sons, Inc., 1966.
10. Ferguson, G. A., *Statistical Analysis in Psychology and Education*, New York: McGraw-Hill Book Company, 1966.
11. Griffiths, D. E., D. L. Clark, D. R. Wynn, and L. Iannaccone, *Organizing Schools for Effective Education*, Danville, Illinois: The Interstate Publishers, Inc., 1962.
12. Lane, W. R., R. G. Corwin, and W. G. Monahan, *Foundations of Educational Administration*, New York: The MacMillan Company, 1966.

13. Leavitt, Harold J., "Applied Organizational Change in Industry: Structural Technological and Humanistic Approaches," in (eds.) Netzer, L. A., et al, *Interdisciplinary Foundations of Supervision*, Boston: Allyn and Bacon, Inc., 1970, pp. 45-58.
14. Lindquist, E. F., *Design and Analysis of Experiments in Psychology and Education*, Boston: Houghton Mifflin Company, 1953.
15. MacKay, D. A., "Should Schools be Bureaucratic?" *The Canadian Administrator*, 4, November 1964, pp. 5-8.
16. Masse, D., "Teacher Participation and Professional Attitudes," Unpublished doctoral dissertation, University of Alberta, 1969.
17. Miklos, E., "Increasing Participation in Decision Making," *The Canadian Administrator*, 9, March 1970, pp. 25-29.
18. Morris, W. T., *Decentralization in Management Systems*, Columbus: Ohio State University Press, 1968.
19. Neal, W. D., "Centralization and Decentralization," *The Canadian Administrator*, 3, May 1964, pp. 31-34.
20. Otto, H. J., and D. F. Veldman, "Control Structure in Public Schools and the Decision and Influence Roles of Elementary School Principals and Teachers," *Educational Administration Quarterly*, 3, Spring 1967, pp. 149-161.
21. Riffel, J. A., "The Dynamics of Authority Relationships and Their Implications for the Schools," *CSA Bulletin*, 8, April 1969, pp. 23-44.
22. Sharma, Chirangi Lal, "Who Should Make What Decisions," *Administrator's Notebook*, 8, April 1955.
23. Simpkins, W. S., "The Distribution of Decision-Making Authority in the School," Unpublished doctoral dissertation, University of Alberta, 1968.
24. Tannenbaum, A. S., *Social Psychology of the Work Organization*, Belmont, Cal.: Wadsworth Publishing Company, 1966.
25. Walters, Robert N., "An Analysis of the Extent to Which Teachers Participate in the Administration of the Public Schools of Mississippi," Unpublished doctoral dissertation, University of Mississippi, 1967.

26. Wilson, K. A., "Principals' Perceptions of School Autonomy and the Relationship of These Perceptions to Selected Characteristics of Schools and Principals," Unpublished Master's thesis, University of Alberta, 1968.

APPENDIX A

SUMMARY OF THE COMPUTED SCORES DERIVED FROM
THE SCHOOL AUTHORITY SCALE AND FROM
THE PARTICIPATION SCALE

A total of eighteen scores for each respondent were obtained from the *School Authority Scale* and the *Participation Scale* by classifying the budget items on these scales as (1) directly related to the instructional program (items, 1, 3, 5, 10, 11, 15, 16, 17, 18, and 22), (2) somewhat related to the instructional program (items 2, 4, 7, 9, 12, 13, and 21), and (3) peripherally related or not related to the instructional program (items 6, 8, 14, 19, and 20). The eighteen computed scores are summarized below.

School Authority Scale Scores

	Subscale	Relatedness to the Instructional Program
ASA ₁	Actual School Authority	directly related
ASA ₂	Actual School Authority	somewhat related
ASA ₃	Actual School Authority	peripherally or not related
PSA ₁	Preferred School Authority	directly related
PSA ₂	Preferred School Authority	somewhat related
PSA ₃	Preferred School Authority	peripherally or not related

Participation Scale Scores

	Subscale	Relatedness to the Instructional Program
ATP ₁	Actual Teacher Participation	directly related
ATP ₂	Actual Teacher Participation	somewhat related
ATP ₃	Actual Teacher Participation	peripherally or not related
APP ₁	Actual Principal Participation	directly related
APP ₂	Actual Principal Participation	somewhat related
APP ₃	Actual Principal Participation	peripherally or not related
PTP ₁	Preferred Teacher Participation	directly related
PTP ₂	Preferred Teacher Participation	somewhat related
PTP ₃	Preferred Teacher Participation	peripherally or not related
PPP ₁	Preferred Principal Participation	directly related
PPP ₂	Preferred Principal Participation	somewhat related
PPP ₃	Preferred Principal Participation	peripherally or not related

APPENDIX B

SCHOOL BUDGET QUESTIONNAIRE

GENERAL INSTRUCTIONS

1. Please reply to all questions.
2. Please read carefully the instructions for each section.
3. The questionnaire consists of three sections. The time required to complete the questionnaire is about 20 minutes.

YOUR ASSISTANCE IS MUCH APPRECIATED

SECTION A - SCHOOL BUDGET AUTHORITY

INSTRUCTIONS: For each budget item, you are asked to report your opinions on the degree of actual budget autonomy granted to your school and the degree of budget autonomy you would prefer to have granted to your school.

The degrees of budget autonomy you are asked to select from are:

1. NO DIRECT INVOLVEMENT BY SCHOOL -- *indicates that the central office prescribes the amount allocated to the item in question for your school*
2. SOME REALLOCATION AUTHORITY -- *indicates that the central office prescribes the amount allocated to the item in question but that, to some extent, your school can increase this amount by cutting back on another item.*
3. CONSIDERABLE REALLOCATION AUTHORITY -- *indicates that the central office prescribes the amount allocated to the item in question but that, to a considerable extent, your school can increase this amount by cutting back on another item.*
4. SCHOOL AUTONOMY -- *indicates total school independence in deciding the amount to be allocated to the item in question*

To answer each budget item in this section:

A. Check one of the four boxes following the word ACTUAL to record your opinion on the degree of autonomy actually granted to your school at the present time;

AND

B. Check one of the four boxes following the word PREFERRED to record your preference for the degree of autonomy that should be granted.

EXAMPLE: Suppose for the budget item "Art supplies" that you believe your school has no authority over the amount to be made available for the purchase of art supplies. You would check the first box following ACTUAL as shown below.

Suppose further, for the same budget item, that you believe the central office should establish an amount to be made available for the purchase of Art supplies, but the school should be granted the authority to increase this amount considerably by cutting back elsewhere. You would check the third box following PREFERRED as shown below.

BUDGET ITEM		NO DIRECT INVOLVEMENT BY SCHOOL	SOME REALLOCATION AUTHORITY	CONSIDERABLE REALLOCATION AUTHORITY	SCHOOL AUTONOMY
Art supplies	ACTUAL PREFERRED	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

SECTION A - SCHOOL BUDGET AUTHORITY

BUDGET ITEM		NO DIRECT INVOLVEMENT BY SCHOOL	SOME REALLOCATION AUTHORITY	CONSIDERABLE REALLOCATION AUTHORITY	SCHOOL AUTONOMY
1. Textbooks	ACTUAL PREFERRED	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
2. Free reading books	ACTUAL PREFERRED	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
3. Student reference books	ACTUAL PREFERRED	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
4. Professional reference books	ACTUAL PREFERRED	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
5. Supplies for classroom use (paper, chalk, stapler, thumb tacks)	ACTUAL PREFERRED	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
6. Supplies for general school use (paper, tape, envelopes, not for classroom use)	ACTUAL PREFERRED	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
7. Duplicating equipment	ACTUAL PREFERRED	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
8. Office equipment (other than duplicating equipment)	ACTUAL PREFERRED	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
9. Audio-visual equipment (projectors of all types, record players, tape recorders)	ACTUAL PREFERRED	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
10. Audio-visual materials (transparencies, film strips, records)	ACTUAL PREFERRED	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
11. Wall maps and posters for classroom use	ACTUAL PREFERRED	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
12. Classroom tables, chairs, desks	ACTUAL PREFERRED	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
13. Classroom bookcases, showcases, bulletin boards	ACTUAL PREFERRED	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
14. Staff lounge furniture	ACTUAL PREFERRED	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
15. Science supplies	ACTUAL PREFERRED	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
16. Art supplies	ACTUAL PREFERRED	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
17. Music supplies	ACTUAL PREFERRED	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
18. Physical Education supplies	ACTUAL PREFERRED	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
19. Caretaking services	ACTUAL PREFERRED	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
20. Secretarial services	ACTUAL PREFERRED	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
21. Paraprofessional services (teacher aides, library assistants)	ACTUAL PREFERRED	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
22. Professional services (teachers, guidance personnel)	ACTUAL PREFERRED	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>

SECTION B - PARTICIPATION IN DECISIONS

INSTRUCTIONS: For each budget item, you are asked to report your opinions on the degree of actual participation and the degree of preferred participation of the teachers and the principal in your school in deciding how the sum budgeted for the item in question is to be spent.

The degrees of participation you are asked to select from are:

1. NO DIRECT PARTICIPATION -- indicates no participation whatsoever in deciding how the money budgeted for the item in question is to be spent
2. ADVICE IN DECISION -- indicates some participation in deciding how the money budgeted for the item in question is to be spent through consultation with the person(s) making the final decision
3. COOPERATIVE DECISION -- indicates considerable participation in cooperation with some other person(s) in deciding how the money budgeted for the item in question is to be spent
4. AUTONOMOUS DECISION -- indicates total independence in deciding how the money budgeted for the item in question is to be spent. No other persons participate directly

The persons whose participation you are asked to report are:

1. Teacher(s) -- may be an individual teacher or a group of teachers
2. Principal -- the principal of your school

To answer each budget item in this section:

- A. Check one of the four boxes on each line following the word ACTUAL to record your opinion on how the decision is actually made at the present time for your school;

AND

- B. Check one of the four boxes on each line following the word PREFERRED to record your preference for how the decision should be made.

EXAMPLE: Suppose for the budget item "Art supplies" that you believe the school principal makes the decision in cooperation with someone outside the school and that the teachers have no participation in the decision. You would check the boxes following ACTUAL as shown below.

Suppose further, for the same budget item, that you believe the decision should be exclusively by teachers. You would check the boxes following PREFERRED as shown below.

BUDGET ITEM		NO DIRECT PARTICIPATION	ADVICE IN DECISION	COOPERATIVE DECISION	AUTONOMOUS DECISION
Art supplies	ACTUAL Teacher(s)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Principal	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	PREFERRED Teacher(s)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	Principal	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

SECTION B - PARTICIPATION IN DECISIONS

BUDGET ITEM		NO DIRECT PARTICIPATION	ADVICE IN DECISION	COOPERATIVE DECISION	AUTONOMOUS DECISION
1. Textbooks	ACTUAL Teacher(s)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Principal	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Free reading books	ACTUAL Teacher(s)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Principal	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Student reference books	ACTUAL Teacher(s)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Principal	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Professional reference books	ACTUAL Teacher(s)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Principal	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Supplies for classroom use (paper, chalk, stapler, thumb tacks)	ACTUAL Teacher(s)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Principal	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Supplies for general school use (paper, tape, envelopes, not for classroom use)	ACTUAL Teacher(s)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Principal	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Duplicating equipment	ACTUAL Teacher(s)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Principal	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Office equipment (other than duplicating equipment)	ACTUAL Teacher(s)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Principal	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Audio-visual equipment (projectors of all types, record players, tape recorders)	ACTUAL Teacher(s)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Principal	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Audio-visual materials (transparencies, film strips, records)	ACTUAL Teacher(s)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Principal	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. Wall maps and posters for classroom use	ACTUAL Teacher(s)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Principal	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

SECTION B - PARTICIPATION IN DECISIONS

BUDGET ITEM		NO DIRECT PARTICIPATION	ADVICE IN DECISION	COOPERATIVE DECISION	AUTONOMOUS DECISION
12. Classroom tables, chairs, desks	ACTUAL Teacher(s)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Principal	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. Classroom bookcases, showcases, bulletin boards	ACTUAL Teacher(s)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Principal	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14. Staff lounge furniture	ACTUAL Teacher(s)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Principal	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15. Science supplies	ACTUAL Teacher(s)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Principal	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16. Art supplies	ACTUAL Teacher(s)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Principal	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17. Music supplies	ACTUAL Teacher(s)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Principal	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
18. Physical Education supplies	ACTUAL Teacher(s)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Principal	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
19. Caretaking services	ACTUAL Teacher(s)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Principal	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
20. Secretarial services	ACTUAL Teacher(s)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Principal	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
21. Paraprofessional services (teacher aides, library assistants)	ACTUAL Teacher(s)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Principal	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
22. Professional services (teachers, guidance personnel)	ACTUAL Teacher(s)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Principal	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

SECTION C

1. Sex:

1 male

2 female

2. Age:

1 under 25 years
2 25 to 29 years
3 30 to 34 years
4 35 to 39 years
5 40 to 44 years

6 45 to 49 years
7 50 to 54 years
8 55 to 59 years
9 60 years or over

3. Marital status:

1 single
2 married

3 widowed, divorced, or separated

4. Position:

1 teacher
2 principal, teaching less than half time
3 principal, teaching more than half time
4 assistant principal, teaching less than half time
5 assistant principal, teaching more than half time

6 librarian, teaching less than half time
7 librarian, teaching more than half time
8 counsellor, teaching less than half time
9 counsellor, teaching more than half time
10 other: Specify _____

5. School Size:

1 12 or fewer teachers
2 13 to 15 teachers
3 16 to 18 teachers
4 19 to 22 teachers

5 23 to 26 teachers
6 27 to 32 teachers
7 33 or more teachers

6. Grade level: To what grade level are you assigned predominantly? If you are assigned equally to more than one grade level, check each grade:

1 grade 1
2 grade 2
3 grade 3
4 grade 4
5 grade 5

6 grade 6
7 grades 7 to 9
8 grades 10 to 12
9 other: Specify _____

7. Years of academic and professional preparation beyond high school:

1 1 year
2 2 years
3 3 years

4 4 years
5 5 years
6 6 or more years

8. How many years have you been in your present school? Count the current school years as one year:

1 1 year
2 2 years
3 3 to 4 years

4 5 to 9 years
5 10 or more years

9. How many years of experience do you have in the field of education as a teacher, principal, counsellor, etc? Count the current school year as one year:

1 1 to 2 years
2 3 to 4 years
3 5 to 7 years

4 8 to 12 years
5 13 to 19 years
6 20 or more years

10. How many years of experience do you have as a principal or assistant principal? Count the current school year as one year:

1 0 years
2 1 to 2 years
3 3 to 4 years
4 5 to 7 years

5 6 to 7 years
6 8 to 9 years
7 10 or more years

APPENDIX C

Table 25
 FACTOR ANALYSIS OF THE ACTUAL SCHOOL AUTHORITY SCALE
 VARIMAX ROTATED FACTORS (3 FACTORS)

Communalities	1	2	3
1 0.515	0.690	0.196	0.024
2 0.700	0.793	0.139	0.230
3 0.727	0.824	0.080	0.113
4 0.613	0.749	0.225	-0.031
5 0.708	0.763	0.184	0.303
6 0.713	0.780	0.188	0.264
7 0.795	0.033	0.844	0.285
8 0.769	0.129	0.830	0.251
9 0.634	0.234	0.692	0.317
10 0.749	0.789	0.258	0.244
11 0.815	0.868	0.188	0.162
12 0.608	0.267	0.713	-0.170
13 0.620	0.699	0.353	0.084
14 0.543	0.454	0.526	-0.245
15 0.785	0.882	0.063	0.057
16 0.836	0.865	0.035	0.293
17 0.653	0.801	0.095	-0.049
18 0.414	0.618	0.138	0.115
19 0.188	0.264	0.185	0.290
20 0.702	0.268	0.176	0.774
21 0.564	0.095	-0.054	0.743
22 0.544	0.057	0.184	0.712
14.197	8.483	3.212	2.503

Table 26

FACTOR ANALYSIS OF THE PREFERRED SCHOOL AUTHORITY SCALE
VARIMAX ROTATED FACTORS (3 FACTORS)

Communalities	1	2	3
1 0.605	0.749	0.074	0.195
2 0.747	0.860	0.050	0.075
3 0.779	0.871	-0.018	0.143
4 0.571	0.633	0.320	-0.260
5 0.691	0.693	0.321	0.329
6 0.727	0.679	0.403	0.322
7 0.751	0.189	0.846	-0.019
8 0.766	0.235	0.820	0.194
9 0.770	0.252	0.838	0.069
10 0.710	0.610	0.559	0.160
11 0.720	0.724	0.420	0.137
12 0.742	0.228	0.830	0.044
13 0.617	0.592	0.440	0.270
14 0.565	0.187	0.600	0.412
15 0.828	0.866	0.157	0.232
16 0.829	0.865	0.205	0.197
17 0.781	0.829	0.257	0.169
18 0.518	0.631	0.340	0.062
19 0.525	0.021	0.697	0.197
20 0.799	0.354	0.576	0.585
21 0.773	0.173	0.582	0.635
22 0.884	0.317	0.093	0.880
15.697	7.727	5.610	2.360

Table 27

FACTOR ANALYSIS OF THE ACTUAL TEACHER PARTICIPATION SCALE
VARIMAX ROTATED FACTORS (3 FACTORS)

Communalities	1	2	3
1 0.703	0.766	-0.316	0.125
2 0.565	0.744	0.087	-0.062
3 0.677	0.806	0.162	-0.035
4 0.602	0.692	0.339	0.089
5 0.500	0.437	0.479	0.281
6 0.138	0.256	0.269	-0.015
7 0.613	0.156	0.252	0.724
8 0.539	0.018	-0.075	0.730
9 0.714	0.140	0.375	0.744
10 0.776	0.797	0.137	0.350
11 0.770	0.788	0.238	0.304
12 0.639	0.087	0.191	0.771
13 0.576	0.437	0.458	0.419
14 0.654	0.255	0.620	0.453
15 0.672	0.772	0.248	0.125
16 0.499	0.504	0.221	0.443
17 0.369	0.423	0.088	0.427
18 0.442	0.559	0.200	0.299
19 0.697	-0.083	0.778	0.290
20 0.807	0.180	0.870	0.137
21 0.805	0.249	0.862	-0.025
22 0.798	0.138	0.840	0.270
13.556	5.551	4.435	3.570

Table 28

FACTOR ANALYSIS OF THE ACTUAL PRINCIPAL PARTICIPATION SCALE
VARIMAX ROTATED FACTORS (3 FACTORS)

Communalities	1	2	3
1 0.409	0.634	-0.069	-0.056
2 0.528	0.726	-0.014	-0.032
3 0.612	0.776	0.029	0.095
4 0.412	0.439	0.184	0.431
5 0.483	0.670	0.073	0.170
6 0.239	0.465	0.149	0.033
7 0.741	0.216	0.827	0.105
8 0.697	0.095	0.795	0.235
9 0.640	0.101	0.734	0.302
10 0.731	0.784	0.327	0.096
11 0.557	0.634	0.395	0.006
12 0.695	0.125	0.822	0.059
13 0.713	0.340	0.742	0.217
14 0.562	0.083	0.607	0.433
15 0.663	0.737	0.231	-0.257
16 0.533	0.639	0.116	0.333
17 0.424	0.577	0.135	0.269
18 0.425	0.584	0.239	0.162
19 0.678	-0.041	0.412	0.712
20 0.752	0.017	0.082	0.863
21 0.697	0.123	0.226	0.794
22 0.803	0.149	0.220	0.856
12.993	5.273	4.196	3.524

Table 29

FACTOR ANALYSIS OF THE PREFERRED TEACHER PARTICIPATION SCALE
VARIMAX ROTATED FACTORS (3 FACTORS)

Communalities	1	2	3
1 0.336	0.401	0.172	-0.382
2 0.435	0.642	0.131	0.074
3 0.463	0.650	0.179	0.088
4 0.240	0.318	0.226	0.296
5 0.620	0.214	0.175	0.737
6 0.721	-0.105	0.240	0.808
7 0.531	0.310	0.156	0.641
8 0.475	0.273	0.163	0.611
9 0.554	0.659	0.105	0.329
10 0.850	0.897	0.206	0.050
11 0.791	0.868	0.191	0.036
12 0.521	0.513	0.440	0.255
13 0.618	0.462	0.610	0.181
14 0.417	0.286	0.565	0.129
15 0.581	0.728	0.226	0.009
16 0.688	0.764	0.197	0.256
17 0.721	0.829	0.101	0.155
18 0.774	0.842	0.153	0.204
19 0.532	0.070	0.654	0.314
20 0.716	0.075	0.801	0.261
21 0.775	0.262	0.840	0.016
22 0.668	0.144	0.804	0.037
12.025	6.484	3.789	2.753

Table 30

FACTOR ANALYSIS OF THE PREFERRED PRINCIPAL PARTICIPATION SCALE
VARIMAX ROTATED FACTORS (3 FACTORS)

Communalities	1	2	3
1 0.477	0.685	0.084	0.034
2 0.619	0.727	0.181	0.241
3 0.640	0.681	0.102	0.406
4 0.348	0.497	0.263	0.181
5 0.658	0.628	0.289	0.424
6 0.634	0.101	0.017	0.790
7 0.731	0.219	0.077	0.823
8 0.425	0.094	0.181	0.619
9 0.595	0.447	0.218	0.590
10 0.839	0.817	0.273	0.310
11 0.850	0.816	0.298	0.310
12 0.628	0.256	0.749	0.044
13 0.780	0.308	0.823	0.084
14 0.681	0.076	0.794	0.212
15 0.862	0.912	0.109	0.138
16 0.828	0.891	0.154	0.101
17 0.824	0.893	0.130	-0.100
18 0.813	0.841	0.298	0.128
19 0.425	0.066	0.561	0.327
20 0.731	0.177	0.835	-0.056
21 0.635	0.250	0.748	0.110
22 0.203	0.342	0.257	0.142
14.227	7.214	4.100	2.912

APPENDIX D

Table 31

CORRELATIONS BETWEEN LEVEL ONE BUDGET ITEMS
AND TEACHERS' SUBSCALE SCORES^a,^b

Budget Item	ASA ₁	PSA ₁	ATP ₁	APP ₁	PTP ₁	PPP ₁
1. Textbooks	0.776	0.620	0.456	0.492	0.539	0.726
3. Student reference books	0.723	0.740	0.561	0.586	0.586	0.779
5. Supplies for classroom use	0.789	0.749	0.572	0.527	0.431	0.434
10. Audio-visual materials	0.798	0.766	0.659	0.726	0.603	0.751
11. Wall maps and posters	0.827	0.716	0.784	0.775	0.679	0.694
15. Science supplies	0.854	0.792	0.712	0.767	0.668	0.693
16. Art supplies	0.830	0.795	0.797	0.781	0.728	0.800
17. Music supplies	0.890	0.827	0.799	0.834	0.771	0.816
18. Physical Education supplies	0.799	0.824	0.817	0.796	0.717	0.774
22. Professional services	0.371	0.622	0.358	0.464	0.658	0.579

^a See Appendix A for descriptions of the subscale abbreviations used in this table.^b All correlations in this table are significant at the .001 confidence level.

Table 32

CORRELATIONS BETWEEN LEVEL ONE BUDGET ITEMS
AND PRINCIPALS' SUBSCALE SCORES^{a,b}

Budget Item	ASA ₁	PSA ₁	ATP ₁	APP ₁	PTP ₁	PPP ₁
1. Textbooks	0.705	0.768	0.512	0.483	0.348 ^d	0.603
3. Student reference books	0.843	0.821	0.641	0.702	0.666	0.760
5. Supplies for classroom use	0.806	0.818	0.636	0.631	0.477	0.730
10. Audio-visual materials	0.856	0.798	0.857	0.832	0.876	0.905
11. Wall maps and posters	0.894	0.840	0.847	0.718	0.838	0.916
15. Science supplies	0.862	0.914	0.799	0.716	0.828	0.934
16. Art supplies	0.901	0.911	0.796	0.722	0.826	0.912
17. Music supplies	0.821	0.873	0.687	0.737	0.802	0.877
18. Physical Education supplies	0.687	0.738	0.767	0.707	0.851	0.913
22. Professional services	0.267 ^c	0.661	0.516	0.407 ^d	0.526	0.456 ^d

^aSee Appendix A for descriptions of the subscale abbreviations used in this table.^bAll correlations in this table are significant at the .001 confidence level except as indicated.^cNot significant at the .05 confidence level.^dIndicates significance at the .01 confidence level.

Table 33

CORRELATIONS BETWEEN LEVEL TWO BUDGET ITEMS
AND TEACHERS' SUBSCALE SCORES^a,^b

Budget Item	ASA ₂	PSA ₂	ATP ₂	APP ₂	PTP ₂	PPP ₂
2. Free reading books	0.776	0.660	0.435	0.385	0.616	0.708
4. Professional reference books	0.740	0.639	0.598	0.390	0.601	0.655
7. Duplicating equipment	0.746	0.764	0.713	0.719	0.608	0.518
9. Audio-visual equipment	0.786	0.779	0.696	0.688	0.766	0.690
12. Classroom tables, chairs, desks	0.695	0.717	0.765	0.831	0.760	0.691
13. Classroom bookcases, showcases, bulletin boards	0.722	0.799	0.769	0.820	0.754	0.718
21. Paraprofessional services	0.510	0.681	0.575	0.680	0.704	0.641

^aSee Appendix A for descriptions of the subscale abbreviations used in this table.^bAll correlations in this table are significant at the .001 confidence level.

Table 34

CORRELATIONS BETWEEN LEVEL TWO BUDGET ITEMS
AND PRINCIPALS' SUBSCALE SCORES ^{a,b}

Budget Item	ASA ₂	PSA ₂	ATP ₂	APP ₂	PTP ₂	PPP ₂
2. Free reading books	0.863	0.625	0.523	0.442 ^d	0.601	0.754
4. Professional reference books	0.785	0.647	0.707	0.594	0.592	0.628
7. Duplicating equipment	0.493	0.765	0.722	0.820	0.674	0.585
9. Audio-visual equipment	0.680	0.846	0.809	0.762	0.653	0.718
12. Classroom tables, chairs, desks	0.527	0.856	0.677	0.728	0.772	0.696
13. Classroom bookcases, showcases, bulletin boards	0.713	0.745	0.751	0.804	0.792	0.755
21. Paraprofessional services	0.290 ^c	0.752	0.610	0.553	0.673	0.669

^aSee Appendix A for descriptions of the subscale abbreviations used in this table.^bAll correlations in this table are significant at the .001 level except as indicated.^cIndicates significance at the .05 confidence level.^dIndicates significance at the .01 confidence level.

Table 35

CORRELATIONS BETWEEN LEVEL THREE BUDGET ITEMS
AND TEACHERS' SUBSCALE SCORES^{a,b}

Budget Item	ASA ₃	PSA ₃	ATP ₃	APP ₃	PTP ₃	PPP ₃
6. Supplies for general school use	0.776	0.701	0.678	0.680	0.769	0.659
8. Office equipment	0.776	0.765	0.773	0.806	0.781	0.767
14. Staff lounge furniture	0.678	0.724	0.674	0.773	0.607	0.682
19. Caretaking services	0.662	0.747	0.806	0.804	0.770	0.785
20. Secretarial services	0.723	0.736	0.821	0.856	0.790	0.786

^aSee Appendix A for descriptions of the subscale abbreviations used in this table.^bAll correlations in this table are significant at the .001 confidence level.

Table 36

CORRELATIONS BETWEEN LEVEL THREE BUDGET ITEMS
AND PRINCIPALS' SUBSCALE SCORES^a,^b

Budget Item	ASA ₃	PSA ₃	ATP ₃	APP ₃	PTP ₃	PPP ₃
6. Supplies for general school use	0.837	0.751	0.605	0.459 ^c	0.692	0.545
8. Office equipment	0.671	0.862	0.503	0.781	0.714	0.658
14. Staff lounge furniture	0.620	0.847	0.784	0.696	0.495	0.603
19. Caretaking services	0.400 ^c	0.725	0.709	0.736	0.733	0.768
20. Secretarial services	0.621	0.850	0.714	0.637	0.800	0.644

^aSee Appendix A for descriptions of the subscale abbreviations used in this table.^bAll correlations in this table are significant at the .001 level except as indicated.^cIndicates significance at the .01 confidence level.

APPENDIX E

Table 37

PERCENTAGE DISTRIBUTIONS OF RESPONSES BY TEACHERS
TO THE SCHOOL AUTHORITY SCALE
(N = 161)

Budget Item	No Direct Involvement By School		Some Reallocation Authority		Considerable Reallocation Authority		School Autonomy
	ACTUAL	PREFERRED	ACTUAL	PREFERRED	ACTUAL	PREFERRED	
1. Textbooks	24.2%	35.4%	8.7	46.6	30.4%	43.5	9.9%
2. Free reading books	26.7	29.2	1.9	11.8	28.6	39.1	15.5
3. Student reference books	22.4	39.1	0.6	14.9	28.0	43.5	47.2
4. Professional reference books	32.3	33.5	1.2	18.6	20.5	39.8	10.6
5. Supplies for classroom use	35.4	37.3	2.5	21.7	16.1	37.3	41.0
6. Supplies for general school use	44.7	35.4	5.6	21.7	11.2	37.3	8.7
7. Duplicating equipment	50.3	34.2	3.1	31.1	35.4	35.4	30.4
8. Office equipment	62.1	24.2	8.7	36.0	9.9	32.3	23.0

Table 37 continued

Budget Item	No Direct Involvement By School	Some Reallocation Authority	Considerable Reallocation Authority	School Autonomy
9. Audio-visual equipment	ACTUAL PREFERRED 49.7% 1.2	33.5% 21.7	11.8% 41.0	5.0% 36.0
10. Audio-visual materials	ACTUAL PREFERRED 33.5 0.6	42.2 12.4	16.1 42.2	8.1 44.7
11. Wall maps and posters for classroom use	ACTUAL PREFERRED 31.7 2.5	44.1 10.6	16.8 42.9	7.5 44.1
12. Classroom tables, chairs, desks	ACTUAL PREFERRED 70.8 8.7	21.7 25.5	5.0 38.5	2.5 27.3
13. Classroom bookcases, showcases, bulletin boards	ACTUAL PREFERRED 60.2 8.7	32.3 21.1	5.0 42.2	2.5 28.0
14. Staff lounge furniture	ACTUAL PREFERRED 80.1 6.8	12.4 31.1	4.3 30.4	3.1 31.7
15. Science supplies	ACTUAL PREFERRED 27.3 1.9	54.0 10.6	11.8 45.3	6.8 42.2
16. Art Supplies	ACTUAL PREFERRED 28.6 0.6	45.3 6.2	19.9 49.1	6.2 44.1
17. Music supplies	ACTUAL PREFERRED 31.1 0.0	50.9 10.6	13.7 50.9	4.3 38.5

Table 37 continued

Budget Item	No Direct Involvement By School		Some Reallocation Authority		Considerable Reallocation Authority		School Autonomy	
	ACTUAL	PREFERRED	ACTUAL	PREFERRED	ACTUAL	PREFERRED	ACTUAL	PREFERRED
18. Physical Education supplies	34.8%	0.0	49.7%	8.1	12.4%	48.4	3.1%	43.5
19. Caretaking services	80.1	26.7	15.5	32.9	3.7	28.6	0.6	11.8
20. Secretarial services	75.8	19.9	14.3	28.6	6.2	28.6	3.7	23.0
21. Paraprofessional services	73.3	11.8	16.1	25.5	8.7	26.1	1.9	36.6
22. Professional services	77.6	12.4	16.8	24.8	4.3	33.5	1.2	29.2

Table 38

PERCENTAGE DISTRIBUTIONS OF RESPONSES BY PRINCIPALS
 TO THE SCHOOL AUTHORITY SCALE
 (N = 53)

Budget Item	ACTUAL PREFERRED	No Direct Involvement By School	Some Reallocation Authority	Considerable Reallocation Authority	School Autonomy
1. Textbooks	15.1% 0.0	60.3% 13.2	20.8% 47.2	3.8% 39.6	
2. Free reading books	22.6 1.9	34.0 3.8	17.0 41.5	26.4 52.8	
3. Student reference books	17.0 0.0	49.1 9.4	18.9 41.5	15.1 49.1	
4. Professional reference books	32.1 1.9	34.0 9.4	15.1 28.3	18.9 60.4	
5. Supplies for classroom use	17.0 1.9	47.2 15.1	24.5 41.5	11.3 41.5	
6. Supplies for general school use	20.8 1.9	49.1 15.1	18.9 41.5	11.3 41.5	
7. Duplicating equipment	71.7 5.7	24.5 24.5	3.8 43.4	0.0 26.4	

Table 38 continued

Budget Item	No Direct Involvement By School	Some Reallocation Authority	Considerable Reallocation Authority	School Autonomy
8. Office equipment	ACTUAL PREFERRED 3.8	75.5% 28.3	20.8% 37.7	3.8% 30.2
9. Audio-visual equipment	ACTUAL PREFERRED 3.8	73.6 17.0	22.6 43.4	0.0 35.8
10. Audio-visual materials	ACTUAL PREFERRED 0.0	18.9 0.0	60.4 7.5	5.7 45.3
11. Wall maps and posters for classroom use	ACTUAL PREFERRED 0.0	24.5 0.0	50.9 7.5	15.1 49.1
12. Classroom tables, chairs, desks	ACTUAL PREFERRED 7.5	73.6 22.6	24.5 39.6	1.9 39.6
13. Classroom bookcases, showcases, bulletin boards	ACTUAL PREFERRED 1.9	58.5 17.0	32.1 1.9	5.7 47.2
14. Staff lounge furniture	ACTUAL PREFERRED 9.4	75.5 20.8	20.8 20.8	1.9 34.0
15. Science supplies	ACTUAL PREFERRED 0.0	17.0 9.4	58.5 9.4	15.1 47.2
16. Art supplies	ACTUAL PREFERRED 0.0	18.9 0.0	54.7 11.3	17.0 47.2

Table 38 continued

Budget Item	No Direct Involvement By School	Some Reallocation Authority	Considerable Reallocation Authority	School Autonomy
17. Music supplies	ACTUAL PREFERRED	39.6% 0.0	43.4% 15.1	9.4% 45.3
18. Physical Education supplies	ACTUAL PREFERRED	62.3 1.9	28.3 15.1	5.7 49.1
19. Caretaking services	ACTUAL PREFERRED	92.5 30.2	7.5 39.6	0.0 18.9
20. Secretarial services	ACTUAL PREFERRED	84.9 7.5	9.4 28.3	5.7 41.5
21. Paraprofessional services	ACTUAL PREFERRED	88.7 7.5	9.4 17.0	1.9 49.1
22. Professional services	ACTUAL PREFERRED	86.8 7.5	13.2 15.1	0.0 43.4

APPENDIX F

Table 39

 PERCENTAGE DISTRIBUTIONS OF RESPONSES BY TEACHERS
 TO THE PARTICIPATION SCALE
 (N = 161)

Budget Item	No Direct Participation		Advice in Decision		Cooperative Decision		Autonomous Decision	
	Participation	Decision	Decision	Decision	Decision	Decision	Decision	Decision
1. Textbooks								
ACTUAL								
Teachers	6.2%		22.4%		65.8%		5.6%	
Principal	6.8		19.3		67.7		6.2	
PREFERRED								
Teachers	0.0		8.7		73.3		18.0	
Principal	5.6		16.1		67.1		11.2	
2. Free reading books								
ACTUAL								
Teachers	0.6		24.2		50.9		24.2	
Principal	20.5		23.6		42.9		13.0	
PREFERRED								
Teachers	0.0		8.7		59.6		31.7	
Principal	15.5		13.7		54.0		16.8	
3. Student reference books								
ACTUAL								
Teachers	4.3		26.7		50.3		18.6	
Principal	14.3		30.4		42.2		13.0	
PREFERRED								
Teachers	0.6		9.9		59.0		30.4	
Principal	11.2		16.1		54.0		18.6	

Table 39 continued

Budget Item		No Direct Participation	Advice in Decision	Cooperative Decision	Autonomous Decision
4. Professional reference books	ACTUAL				
	Teachers	17.4%	23.6%	44.1%	14.9%
	Principal	11.2	32.9	43.5	12.4
	PREFERRED				
	Teachers	1.2	13.0	60.9	24.8
	Principal	5.0	18.6	57.1	19.3
5. Supplies for classroom use	ACTUAL				
	Teachers	50.3	19.9	26.1	3.7
	Principal	13.0	29.8	32.3	24.8
	PREFERRED				
	Teachers	11.2	24.2	45.3	19.3
	Principal	8.1	24.2	50.3	17.4
6. Supplies for general school use	ACTUAL				
	Teachers	64.0	15.5	16.8	3.7
	Principal	19.3	24.2	29.8	26.7
	PREFERRED				
	Teachers	28.0	21.7	35.4	14.9
	Principal	9.9	23.0	42.9	24.2
7. Duplicating equipment	ACTUAL				
	Teachers	63.4	23.0	13.0	0.6
	Principal	21.7	36.6	24.8	16.8
	PREFERRED				
	Teachers	16.1	32.3	43.5	8.1
	Principal	8.7	28.6	52.2	10.6

Table 39 continued

Budget Item		No Direct Participation	Advice in Decision	Cooperative Decision	Autonomous Decision
8. Office equipment	ACTUAL				
	Teachers	73.9%	13.7%	11.2%	1.2%
	Principal	26.7	25.5	28.6	19.3
	PREFERRED				
	Teachers	34.2	26.7	34.2	5.0
	Principal	11.2	25.5	47.8	15.5
9. Audio-visual equipment	ACTUAL				
	Teachers	34.2	34.2	28.0	3.7
	Principal	13.7	34.2	42.2	9.9
	PREFERRED				
	Teachers	5.0	14.3	69.6	11.2
	Principal	1.9	14.9	75.2	8.1
10. Audio-visual materials	ACTUAL				
	Teachers	11.2	32.3	50.9	5.6
	Principal	11.2	29.2	53.4	6.2
	PREFERRED				
	Teachers	1.9	9.3	72.0	16.8
	Principal	6.2	13.0	66.5	14.3
11. Wall maps and posters for classroom use	ACTUAL				
	Teachers	19.9	29.8	45.3	5.0
	Principal	9.9	31.7	49.1	9.3
	PREFERRED				
	Teachers	2.5	11.2	67.1	19.3
	Principal	5.0	17.4	64.0	13.7

Table 39 continued

Budget Item		No Direct Participation	Advice in Decision	Cooperative Decision	Autonomous Decision
12. Classroom tables, chairs, desks	ACTUAL				
	Teachers	66.5%	18.6%	13.7	1.2%
	Principal	25.5	34.2	25.5	14.9
	PREFERRED				
	Teachers	6.8	28.6	54.7	9.9
	Principal	3.7	19.3	65.8	11.2
13. Classroom bookcases, showcases, bulletin boards	ACTUAL				
	Teachers	60.2	21.7	17.4	0.6
	Principal	23.6	36.0	28.6	11.8
	PREFERRED				
	Teachers	4.3	24.2	58.4	13.0
	Principal	1.9	20.5	66.5	11.2
14. Staff lounge furniture	ACTUAL				
	Teachers	77.0	11.8	9.9	1.2
	Principal	50.9	21.7	17.4	9.9
	PREFERRED				
	Teachers	11.2	22.4	54.0	12.4
	Principal	8.1	22.4	57.1	12.4
15. Science supplies	ACTUAL				
	Teachers	13.0	36.6	46.6	3.7
	Principal	9.3	34.8	46.6	9.3
	PREFERRED				
	Teachers	0.6	6.8	77.0	15.5
	Principal	1.9	11.8	71.4	14.9

Table 39 continued

Budget Item	No Direct Participation	Advice in Decision	Cooperative Decision	Autonomous Decision
16. Art supplies	ACTUAL Teachers 20.5% Principal 7.5	32.9% 28.6	44.1% 50.9	2.5% 13.0
	PREFERRED Teachers 0.0 Principal 4.3	9.3 13.7	69.6 65.8	21.1 16.1
17. Music supplies	ACTUAL Teachers 18.0 Principal 11.8	41.0 34.8	36.6 46.6	4.3 6.8
	PREFERRED Teachers 0.0 Principal 6.2	9.9 11.2	68.9 67.1	21.1 15.5
18. Physical Education supplies	ACTUAL Teachers 23.0 Principal 8.1	39.8 36.6	34.2 46.6	3.1 8.7
	PREFERRED Teachers 0.6 Principal 3.7	9.3 12.4	71.4 68.3	18.6 15.5
19. Caretaking services	ACTUAL Teachers 90.1 Principal 47.2	2.5 25.5	6.8 15.5	0.6 11.8
	PREFERRED Teachers 39.8 Principal 22.4	26.7 29.2	30.4 39.8	3.1 8.7

Table 39 continued

Budget Item		No Direct Participation	Advice in Decision	Cooperative Decision	Autonomous Decision
20. Secretarial services	ACTUAL				
	Teachers	85.7	5.0	6.8	2.5
	Principal	44.1	24.2	11.8	19.9
	PREFERRED				
	Teachers	29.2	26.7	40.4	3.7
	Principal	18.0	27.3	46.0	8.7
21. Paraprofessional services	ACTUAL				
	Teachers	72.0	14.3	12.4	1.2
	Principal	40.4	25.5	24.2	9.9
	PREFERRED				
	Teachers	16.1	23.6	47.2	13.0
	Principal	10.6	23.0	52.2	14.3
22. Professional services	ACTUAL				
	Teachers	70.8	18.0	9.3	1.9
	Principal	37.3	31.7	19.9	11.2
	PREFERRED				
	Teachers	15.5	24.8	49.1	10.6
	Principal	8.7	24.2	54.7	12.4

Table 40

PERCENTAGE DISTRIBUTIONS OF RESPONSES BY PRINCIPALS
TO THE PARTICIPATION SCALE
(N = 53)

Budget Item	No Direct Participation		Advice in Decision		Cooperative Decision		Autonomous Decision	
	ACTUAL	PREFERRED	ACTUAL	PREFERRED	ACTUAL	PREFERRED	ACTUAL	PREFERRED
1. Textbooks								
Teachers	1.9%		22.6%		71.7%		3.8%	
Principal	3.8		20.8		73.6		1.9	
2. Free reading books								
Teachers	3.8		11.3		60.4		24.5	
Principal	11.3		28.3		49.1		11.3	
3. Student reference books								
Teachers	5.7		13.2		69.8		11.3	
Principal	7.5		28.3		60.4		3.8	

Table 40 continued

Budget Item		No Direct Participation	Advice in Decision	Cooperative Decision	Autonomous Decision
4. Professional reference books	ACTUAL				
	Teachers	15.1%	17.0%	49.1%	18.9%
	Principal	17.0	22.6	49.1	11.3
	PREFERRED				
	Teachers	1.9	5.7	69.8	22.6
	Principal	1.9	11.3	64.2	22.6
5. Supplies for classroom use	ACTUAL				
	Teachers	18.9	49.1	30.2	1.9
	Principal	7.5	28.3	45.3	18.9
	PREFERRED				
	Teachers	7.5	28.3	52.8	11.3
	Principal	3.8	17.0	62.3	17.0
6. Supplies for general school use	ACTUAL				
	Teachers	37.7	39.6	20.8	1.9
	Principal	5.7	28.3	39.6	26.4
	PREFERRED				
	Teachers	20.8	37.7	35.8	5.6
	Principal	7.5	11.3	54.7	26.4
7. Duplicating equipment	ACTUAL				
	Teachers	60.4	17.0	20.8	1.9
	Principal	43.4	20.8	22.6	13.2
	PREFERRED				
	Teachers	7.5	24.5	60.4	7.5
	Principal	5.7	18.9	60.4	15.1

Table 40 continued

Budget Item		No Direct Participation	Advice in Decision	Cooperative Decision	Autonomous Decision
8. Office equipment	ACTUAL				
	Teachers	83.0%	9.4%	7.5%	0.0%
	Principal	43.4	20.8	17.0	18.9
	PREFERRED				
	Teachers	41.5	18.9	32.1	7.5
	Principal	1.9	18.9	47.2	32.1
9. Audio-visual equipment	ACTUAL				
	Teachers	43.4	22.6	32.1	1.9
	Principal	32.1	34.0	30.2	3.8
	PREFERRED				
	Teachers	0.0	9.4	81.1	9.4
	Principal	0.0	13.2	73.6	13.2
10. Audio-visual materials	ACTUAL				
	Teachers	9.4	15.1	62.3	13.2
	Principal	13.2	24.5	54.7	7.5
	PREFERRED				
	Teachers	0.0	7.5	67.9	24.5
	Principal	5.7	13.2	64.2	17.0
11. Wall maps and posters for classroom use	ACTUAL				
	Teachers	3.8	28.3	56.6	11.3
	Principal	5.7	30.2	58.5	5.7
	PREFERRED				
	Teachers	0.0	11.3	64.2	24.5
	Principal	5.7	17.0	64.2	13.2

Table 40 continued

Budget Item		No Direct Participation	Advice in Decision	Cooperative Decision	Autonomous Decision
12. Classroom tables, chairs, desks	ACTUAL				
	Teachers	49.1%	30.2%	20.8%	0.0%
	Principal	34.0	35.8	28.3	1.9
	PREFERRED				
	Teachers	5.7	9.4	71.7	13.2
	Principal	1.9	13.2	75.5	9.4
13. Classroom bookcases, showcases, bulletin boards	ACTUAL				
	Teachers	34.0	43.4	18.9	3.8
	Principal	22.6	49.1	22.6	5.7
	PREFERRED				
	Teachers	3.8	20.8	62.3	13.2
	Principal	1.9	17.0	66.0	15.1
14. Staff lounge furniture	ACTUAL				
	Teachers	58.5	22.6	17.0	1.9
	Principal	49.1	28.3	20.8	1.9
	PREFERRED				
	Teachers	1.9	15.1	69.8	13.2
	Principal	3.8	13.2	71.7	11.3
15. Science supplies	ACTUAL				
	Teachers	3.8	28.3	54.7	13.2
	Principal	11.3	30.2	50.9	7.5
	PREFERRED				
	Teachers	0.0	9.4	67.9	22.6
	Principal	5.7	15.1	66.0	13.2

Table 40 continued

Budget Item	No Direct Participation		Advice in Decision		Cooperative Decision		Autonomous Decision	
	Teachers	Principal	Teachers	Principal	Teachers	Principal	Teachers	Principal
16. Art supplies								
	ACTUAL							
	Teachers	7.5%			45.3%		39.6%	7.5%
	Principal	5.7			39.6		43.4	11.3
	PREFERRED							
	Teachers	0.0			11.3		69.8	18.9
	Principal	7.5			11.3		62.3	18.9
17. Music supplies								
	ACTUAL							
	Teachers	30.2			26.4		37.7	5.7
	Principal	28.3			28.3		37.3	5.7
	PREFERRED							
	Teachers	0.0			9.4		71.7	18.9
	Principal	5.7			17.0		62.3	15.1
18. Physical Education supplies								
	ACTUAL							
	Teachers	35.8			30.2		28.3	5.7
	Principal	30.2			39.6		26.4	3.8
	PREFERRED							
	Teachers	0.0			11.3		71.7	17.0
	Principal	7.5			18.9		62.3	11.3
19. Caretaking services								
	ACTUAL							
	Teachers	90.6			5.7		3.8	0.0
	Principal	75.5			18.9		3.8	1.9
	PREFERRED							
	Teachers	35.8			37.7		22.6	3.8
	Principal	18.9			45.3		30.2	5.7

Table 40 continued

Budget Item		No Direct Participation	Advice in Decision	Cooperative Decision	Autonomous Decision
20. Secretarial services	ACTUAL				
	Teachers	79.2%	11.3%	9.4%	0.0%
	Principal	56.6	26.4	11.3	5.7
	PREFERRED				
	Teachers	24.5	37.7	30.2	7.5
	Principal	1.9	30.2	47.2	20.8
21. Paraprofessional services	ACTUAL				
	Teachers	75.5	9.4	15.1	0.0
	Principal	56.6	30.2	13.2	0.0
	PREFERRED				
	Teachers	3.8	28.3	60.4	7.5
	Principal	3.8	22.6	60.4	13.2
22. Professional services	ACTUAL				
	Teachers	83.0	9.4	7.5	0.0
	Principal	62.3	28.3	9.4	0.0
	PREFERRED				
	Teachers	3.8	30.2	58.5	7.5
	Principal	1.9	18.9	64.2	15.1

B29988